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NEWS SUMMARY

GENERAL

Beaten Italian Premier resigns

The new Italian coalition Government of Christian Democrats, Republicans and Social Democrats was defeated in the Senate confidence debate at the weekend by one vote, opening the way for an early General Election.

After the 150-149 vote, Sig. Giulio Andreotti, Prime Minister, tendered his resignation to Sig. Sandro Pertini, the Italian President.

Sig. Pertini is now expected to dissolve Parliament to combine the General Election with elections for the European Parliament due in Italy on June 10. Back Page

Attack planned

Ugandan exile forces yesterday claimed that they were still in a position to take the capital Kampala in spite of confirmed reports that they had been driven back 20 miles from the city in an assault apparently spearheaded by Libyan troops supporting President Idi Amin. Page 2

Bomb hurts four

A bomb explosion yesterday in the centre of Omagh, County Tyrone, injured a policeman and three civilians, and damaged a row of shop fronts. Police said they were clearing the area after a warning when the bomb went off.

Hostage freed

El Salvador guerrillas have released the Japanese businessman held hostage in El Salvador for almost four months. The fate of the two Britons abducted at the same time is unknown.

Republic vote

Religious leader Ayatollah Khomeini yesterday proclaimed Iran an Islamic Republic after the results of the two-day referendum showed 97 per cent in favour of the move. At the end of voting three soldiers were killed and another wounded by gunmen who opened fire outside a Tehran polling station. Page 3

Guerrilla theory

Italian police believe thieves who stole about £500,000 worth of gold and plantinum from the Paris-Rome express could have been urban guerrillas. The thieves stopped the train by using an electronic device to change a signal, and unhooked the last five carriages carrying the bullion.

Shortage feared

Farmers have warned that the shortage of vegetables caused by the Arctic winter is likely to continue during the summer because the latest wet, cold weather is preventing sowing. Page 4

Capital joke

Listeners to London's Capital Radio fell for the station's April Fool joke. They jammed the switchboard with protest calls after an announcement that the Government planned to abolish the next two Thursdays.

Briefly . . .

Death toll in the Golborne colliery disaster two weeks ago rose yesterday to 10 with the death in hospital of Raymond Hill, 33.

Wreckage of a light aircraft missing since Friday was found yesterday in Clwyd, Wales. Both pilot and passenger were dead.

A man died in a fall yesterday at Shepherds Crag, Borrowdale, in the Lake District.

BUSINESS

Row hits pay talks for civil servants

● CIVIL SERVICE'S two biggest unions decided yesterday to try to dismantle the whole national negotiating machinery for Britain's 600,000 civil servants in a bout of inter-union wrangling.

Today, civil servants are staging a one-day strike, which is likely to affect civil aviation, courts and government services. Back Page

● UK INDUSTRY's confidence about economic prospects continued to decline last month, according to the FT survey of business opinion. Confidence remains at the lowest level since the end of 1976, when the International Monetary Fund loan package was being negotiated. Back Page

● EEC FINANCE and Foreign Ministers today begin a meeting in Luxembourg to discuss the Community's budget and European political problems. The British team, led by Dr. David Owen, the Foreign Secretary, is expected to protest at the contribution levied from Britain. Back Page

● GOVERNMENT funds of about £100m-£150m are expected to be announced today for BL, formerly British Leyland, and the way will be cleared for the Industry Bill to receive Royal Assent giving the NEB a borrowing ceiling of £4.5bn. Back Page

OPEC price rise takes effect

● OPEC OIL PRICES rise by an average 17 per cent yesterday adding about £23bn a year to the UK oil imports bill according to market estimates. The European Community alone is expected to pay at least $7bn (£3.5bn) a year more as a result of arrangements with leading exporters last week.

● STERLING'S strength is Britain's biggest economic problem at present according to a forecast by a group of Cambridge economists. Page 4

● BANK LENDING to manufacturing industry rose sharply in the three months to mid-February, although the Bank of England's figures are likely to have been boosted by industrial disputes. Page 9

● ROLLS-ROYCE MOTORS has started talks with U.S. Teledyne Continental Motors Corp. about a possible licence agreement to make R-R military diesel engines in the U.S. Page 4

LABOUR

● TEAMSTERS' union in the U.S. announced that it would immediately start selective strikes against American road haulage concerns following a breakdown in pay talks. Back Page

● OFFICIAL PAY review body may recommend to the Government in about a month to give salary increases of 5-10 per cent to chairmen of nationalised industries and top civil servants. Page 5

COMPANIES

● BROKEN HILL Proprietary, Australia's largest company, is to make a one-for-five scrip issue, its first since 1974, following a sharp jump in profit for the November half-year to A$87m (£47.8m) which exceeds the full 1977-78 profits. Page 29

● LAIRD GROUP second half profits rose to £6.29m (£5.08m) bringing 1978's pre-tax profit to £11.12m (£9.09m). Page 28

CONTENTS

BL in talks with Japanese group on UK venture

BY ARTHUR SMITH, MIDLANDS CORRESPONDENT

Talks are taking place between BL, formerly British Leyland, and a Japanese company about collaboration on car assembly in the UK.

Mr. Michael Edwardes, BL chairman, has called a conference of senior executives and union leaders in London next Monday at which details of any possible deal are expected to be discussed.

BL has made no secret of the need for some form of collaboration or partnership to guarantee the long-term viability of its car production.

The obvious weakness is middle-range cars, where the LC-10 replacement for the Marina and Allegro, scheduled for Cowley, Oxford, is not expected to be ready for the market until early 1983.

Shortage of technical resources has delayed development of the new car and raised doubts as to whether BL will be able to generate enough finance for the project.

Hopes of an early link with Renault, the French State company, have faded. Talks about joint ventures in component manufacture and assembly have made little progress.

The obvious advantage for the Japanese of co-operation with BL would be to sidestep protest about foreign imports. Controversy surrounds the unofficial quota system by which the Japanese have agreed to hold penetration of the UK market between 10 and 11 per cent.

Negotiations would undoubtedly be sensitive. BL is looking for the quick introduction of a new middle-range car to safeguard employment at Cowley, where the Marina and Maxi are produced.

Licensed assembly of a Japanese car could only provide a stop-gap. The attraction of any deal would depend partly on how rapidly the use of British-made components built up.

The issue seems bound to figure in the General Election debate. The Conservative Bow Group recommended in a recent pamphlet that BL should be urged to seek a joint venture with Japan.

The political implications, however, spread far beyond Britain. The question is likely to be raised in the EEC of whether Japanese involvement in the UK might provide a springboard for wider European sales.

BL refused to comment last night about any collaboration but denied that plans had been suggested or were pending to close its assembly plant at Seneffe, Belgium.

Seneffe, which employs 3,000 workers on assembling the Mini and Allegro, has recently been working only two weeks in four because of weak demand. BL said that the plant had been under review, with others in the UK, under the efficiency audit called for by Mr. Edwardes more than 12 months ago.

In spite of the good performance of the Belgian plant, unit cost of vehicles was about £200 higher because of transport and other costs.

Mr. Edwardes made clear at the announcement of the annual results last month that no big plant closures were envisaged. He specifically ruled out closure of Seneffe.

● Jaguar Rover Triumph has changed the names of its North American sales companies. In the U.S. the company will trade under Jaguar Rover Triumph Inc. and elsewhere it will be Jaguar Rover Triumph Canada. North America takes about a quarter of British output.

More funds for BL, Back Page

Rees announces tighter security for MPs

BY ELINOR GOODMAN, LOBBY STAFF

THE HOME Secretary said yesterday that steps had already been taken to tighten the security of MPs in the wake of [illegible] the Shadow Northern Ireland Secretary.

But both Mr. Merlyn Rees, and Mr. David Howell, a Conservative front bench spokesman on Home Affairs, stressed that terrorist activities should not be allowed to interfere with the election.

Nevertheless, Mr. Neaves' death cast a shadow over the weekend and the unofficial campaign got off to a muted start. MPs were still clearly shocked by the incident. Mrs. Margaret Thatcher had still not decided whether to use her right to reply as Leader of the Opposition to make a ministerial broadcast before the time limit expires tonight.

Conservative Press advertisements for the Sunday papers were cancelled because of Mr. Neaves' death and Mrs Thatcher seems unlikely to campaign publicly until his funeral on Wednesday or Thursday.

Mrs. Thatcher's hopes of winning a clear majority on May 3 were given a further boost yesterday by an opinion poll carried out for London Weekend Television in 100 of the most marginal seats in Britain.

The poll, which will be repeated by Marplan for the Weekend World programme each week throughout the campaign, showed Tories could [illegible] to [illegible] the election [illegible] majority of more than [illegible]. The swing to the Conservatives in these seats since [illegible] election was shown to be 7.2 per cent.

The survey also showed that the voters in these key constituencies thought the Conservatives would be the best party to deal with all the major issues except unemployment. The voters main concern was inflation.

The Conservatives were [illegible] ahead on law and order and [illegible] expectation yesterday among MPs was that it might take on more importance temporarily following Mr. Neaves' murder but that, with almost a month to go before the poll, it would not have a big affect on the poll.

The official campaign is not due to start until April 9 and though everything that is said by politicians this week will be seen in the context of the election—including the Chancellor's introduction to the agreed shortened Finance Bill tomorrow—much of the activity will take place behind the scenes. At the request of its left-wing members, the Labour Party's National Executive is to hold an emergency meeting today to thrash out what it regards as the priorities for the forthcoming campaign.

[illegible] should be [illegible] next week [illegible] the weekend were that the Conservatives might torpedo Labour's hopes of benefiting from a long campaign. Party organisers were thought to be considering delaying the start of the daily press conferences until the following week even if, as expected, the other parties started theirs on April 9.

Labour had hoped that Mrs. Thatcher might expose what they regard as her weaknesses during a long campaign but it now looks as if the Conservatives will try to project other shadow ministers during the first week of the campaign rather than allowing it to develop into a straight run-off between Mrs. Thatcher and Mr. Callaghan.

The argument in Central Office is not that Mrs. Thatcher is less popular than the Prime Minister but that the Conservatives want to fight the election on policies rather than personalities and by taking the campaign to the country in the first week rather than getting bogged down in daily press conferences, they will show the differences between the two parties.

Airlines agree on fare rises

BY MICHAEL DONNE, DEFENCE CORRESPONDENT

THE WORLD'S major airlines are expected to reach final agreement today to raise passenger fares and cargo rates by 5 per cent or more from May 1 to meet soaring fuel bills.

More than 100 member-airlines of the International Air Transport Association reached broad agreement on this rise in Geneva over the weekend. But it is still subject to some final adjustments at a meeting today and to the approval of all the governments of the airlines involved.

It will then be left to individual airlines to determine what level of rises is most appropriate to the prevailing economic circumstances. Suggestions that the increases might be as much as 10 per cent were discounted over the weekend by IATA.

IATA called the meeting to consider fares increases to meet the sharp rises in fuel bills over the past three months. These stem not only from the Iranian oil supplies cut-off but also the general increases in prices announced by OPEC both from January 1 and earlier last week.

These crude oil price increases will cause the cost of aviation gasoline to airlines to rise from the present average worldwide of 48 cents a U.S. gallon to about 60 to 65 cents a gallon by mid-summer. A further rise to 70 cents or more a gallon is likely before the end of this year.

The airlines have for some time been absorbing the extra cost of fuel and rises in labour charges, landing fees, navigation charges, equipment costs and changes in exchange rates. Margins have been reduced considerably and airlines have reached the point where they say they can no longer absorb the increases.

Holiday charter operators are also applying surcharges on package holidays, especially those from the UK to the Continent.

British Airways Sovereign holidays, for example, is telling all its clients that they must pay surcharges up to about 4 per cent or 5 per cent a person on summer holidays.

Thorn considers U.S. purchase

BY JOHN LLOYD

THORN Electrical Industries, one of the UK's leading electronics and TV set manufacturers, is understood to be conducting serious negotiations for the purchase of a medium-sized U.S. company, Modular Computer Systems, of Fort Lauderdale, Florida.

The U.S. company, which had sales of $65m last year and employs 1,200 people, manufactures computerised process control equipment. Its customers include Union Carbide and International Telephone and Telegraph.

It has subsidiaries in France, Germany and UK. The UK plant, at Wokingham, Berkshire, recently opened a test facility for the company's products. Further expansion, in either the UK or the Irish Republic, is planned.

A spokesman for Modular Computer Systems said that three companies—two large multinationals and a private organisation—were interested in buying the company, though the private company's interest was now "dormant." Both multinationals were interested in an outright purchase.

Thorn would make no comment on the possible purchase, but said that it was examining a number of opportunities in the U.S.

Thorn had reserves of £192.7m at the end of the 1977-78 financial year. In the same year, it showed a pre-tax profit of £110m on sales of £1.1bn, up from a profit of £102m on sales of £993m the previous year.

Last week it announced the appointment of Mr. Peter Laister as managing director. He succeeds Mr. Jack Strowger in August. Mr. Laister, managing director of Ellerman, has had senior executive experience in the U.S. as chairman of a British Oxygen holding company after BOC acquired Airco.

Carter inspects leaking N-plant

By David Buchan in Washington

PRESIDENT CARTER yesterday flew to the crippled Pennsylvania nuclear plant, whose reactor was reported stable and cooling very slowly—but still plagued by a build-up of hydrogen gas inside.

The inspection tour by the President reflects the intense national concern focussed on the Three Mile Island plant since it was hit by an accident last Wednesday and potentially dangerous complications since.

Four workers of Metropolitan-Edison, the power company operating the plant, have been exposed on the site to more radiation than is considered safe over a three-month period. Low-level radioactive gas is still escaping to a wider area around the plant.

Pregnant women and young children have been advised by the Governor of Pennsylvania to stay at least five miles from the plant. In all, a couple of thousand people are believed to have left the immediate area.

Mr. Joseph Hendrie, chairman of the Nuclear Regulatory Commission (NRC), which is co-ordinating the attempted shut-down of the plant, said steps to get rid of the hydrogen gas bubble inside the reactor within the next day or so might entail evacuating all people 10 to 20 miles downwind of the plant, sited on an island in the Susquehanna river.

The nuclear accident and public fears about its aftermath will inevitably bear heavily on the energy policy statement that the President is expected to issue shortly. Mr. Carter, who visited the site of a Canadian nuclear accident in 1949 while a nuclear engineer in the U.S. Navy, inspected the reactor's control on a day after the NRC announced that operators there [illegible] protective masks for the first time since the accident.

Mr. Harold Denton, the NRC's director of reactor regulation, said that further inspection of the Three Mile Island plant would be needed before any action was taken to close down eight other reactors of an identical design. Thirteen anti-nuclear demonstrators were arrested on Saturday for climbing the fence of one of those eight reactors in California.

Foreign governments—as well as pro and anti-nuclear lobbies abroad—have expressed keen interest and concern in the

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U.S. reactor disaster—threat to nuclear policy, Page 14

Arab League decides to boycott Egypt

BY ROGER MATTHEWS IN BAGHDAD

A DECISION by the Arab League at the weekend to impose an almost total political, diplomatic and economic boycott on Egypt is seen in Iraq as a decisive switch in the Arab world's balance of power.

The meeting forced Saudi Arabia and the other moderate oil-producing Gulf states to join more militant Arab countries in working directly against the Egyptian-Israeli peace treaty and against efforts by the U.S. to make the treaty a cornerstone for wider settlements in the Middle East.

The agreement by 19 of the League's 21 members was greeted as a triumph for Arab unity.

Sudan and Oman did not agree. They have consistently supported President Sadat's peace initiative and sent no representatives to Baghdad.

For the Palestine liberation organisation, the outcome, after five days of intensive bargaining by Foreign and Economic Ministers, was hailed as a "great victory."

Saudis' price

For Prince Saud Al-Feisal, the Saudi Foreign Minister, it was an occasion of "regret and sadness" that President Anwar Sadat had made such decisions necessary. Saudi Arabia did not believe that having to take such sanctions against Egypt was a cause for rejoicing, but it would implement all the decisions deached at the conference.

Iraq and Syria, which effectively led the opposition to President Sadat's peace effort, have every reason to feel satisfied. They consider their achievements the "minimum acceptable," however.

Nothing prevents individual states from imposing even tougher action against Egypt, although it seems that formal measures against the U.S., as the "architect" of the peace treaty, will not be taken. That may be part of the price exacted by the Saudis.

A positive aspect, as seen by the Saudis, may be that the conference decisions will force the U.S. to be much stricter with Israel in the tripartite negotiations, starting in three weeks on the autonomy plan for the occupied West Bank and Gaza Strip.

The full effect of the sanctions will only become clear over the next few months and many detailed decisions remain to be taken. The Arab Boycott Office in Damascus has responsibility for defining individual elements of the boycott.

The main decisions include suspension of Egypt's membership of the Arab League; removal of Arab League headquarters from Cairo to Tunis within two months; and immediate withdrawal of Arab ambassadors from Cairo.

Diplomatic relations are to be cut in a month after constitutional formalities in each country. It is widely expected, however, that many Arab countries will maintain sizeable "interest sections" in Egypt, effectively for diplomatic work.

Loans, bank deposits, guarantees or financial, material or technical contributions to the Egyptian state or related bodies are to end. Economic aid from Arab funds is to be banned.

Arab joint ventures with the Egyptian Government or its institutions must be halted. That might affect the Arab Organisation for Industrialisation, under which an armaments industry is being built up. Work is advanced in Egypt for production of the British Swingfire anti-tank missile and the Westland Lynx helicopter, in a $400m deal.

Arab Governments and their institutions are to refrain from taking shares or participating in "general debt" issued by the Egyptian Government.

As Egypt has agreed to provide Israel with oil, Arab countries will refuse oil to Egypt. Commercial transactions with the Egyptian Government and companies dealing with Israel are banned.

Special care will, however, be taken to maintain good relations with individual Egyptians working in Arab countries.

Minimum level

The United Nations will be asked to transfer its regional offices from Cairo. Members of the conference will seek Egypt's suspension from the Non-Aligned Movement, the Organisation of African Unity and the Islamic Conference.

The scope of those decisions goes beyond the "minimum level" agreed at the Baghdad summit last November and must come as a serious psychological blow to President Sadat. It makes his financial reliance on the U.S., supplying $1bn a year aid, even greater and means that the Arab safety net provided in the past by Saudi Arabia, Kuwait, Qatar and Abu Dhabi has been removed, placing even greater emphasis on successful economic policies at home.

OVERSEAS NEWS

Curfew and geiger counters in Middletown

David Buchan reports from the scene of America's worst nuclear accident

THESE DAYS there is a 9 p.m. to 7 a.m. curfew in Middletown, Pennsylvania, only a few thousand yards from the stricken nuclear reactor that squats ominously out in the broad Susquehanna River, still spewing out plumes of radioactive gas and vapour. Mr. Robert Reid, the town's mayor, ordered the curfew—not because the governor of his State had advised people to stay indoors as much as possible since Wednesday's nuclear accident—but to prevent looting. So many of its 11,000 population have left Middletown that their empty houses invite pilfering. Asked what he would do with looters, Mr. Reid, who boasts of being Pennsylvania's only black mayor, said half-seriously "shoot 'em."

His reaction is typical of the area, situated between the site of that 19th century bloodbath, Gettysburg, and the Pennsylvanian Dutch country to the east, where fundamentalist Amish and Mennonite sects regard buttons, let alone nuclear generators, as dangerously newfangled. Torn between the now very real danger of radiation, and a stolid, workmanlike view that nuclear power, like any other energy-producing business, is risky but necessary, the 150,000 people within 10 miles of the damaged reactor have not panicked.

Several thousand have left the area to stay with friends or to take early holidays, and the 70,000 inhabitants of Harrisburg were jolted by a general alarm siren accidentally set off in the Pennsylvania State capital on Friday. But only one evacuation centre, at Hershey (better known as the chocolate-making capital of America), had any customers by this weekend—130 adults and children with nowhere else to go.

So for the moment, Pennsylvanians, like everyone else, are suspended in uncertainty. They have seen the men with Geiger counters on their streets. Some, crowding into Press conferences in Middletown, have heard Nuclear Regulatory Commission officials estimate that the accident has increased local residents' chances of cancer, though only by one or two cases for every 10,000 of them exposed to 1,000 millirems of radiation—a level the NRC does not think will occur—and the area's farmers have been alarmed by the report that at least one supermarket chain, Safeway, has stopped buying Pennsylvanian milk.

The country's resources are now mobilised to deal with the accident, following President Carter's advice to everyone "to err on the side of caution and safety." Top NRC inspectors from Washington are now supervising the operation of Metropolitan Edison, the company that runs the plant. The Energy Department is present in force.

The inquest on the accident, and by the start of the week no one had much clue how or when it would end—will be carried out chiefly in Washington by the NRC and Congress. But Mr. Reid, the Middletown mayor, says that he and fellow local officials will want substantial reassurances before the plant ever starts up again.

Peking decree silences wallposter dissidents

BY JOHN HOFFMANN IN PEKING

THE PEKING leadership has effectively silenced the voice of dissidence and democracy in the city, both by decree and by swiftly erasing the wallposters which were their visible evidence.

Laneways, walls in Peking's main shopping streets and construction-site fences were conspicuously unadorned yesterday following a city-wide clean-up.

Wallposters remained at the "Wall of Democracy" at the city's west end, and an unusually big crowd of readers gathered there yesterday, realising that this was now their only canvas for free expression.

The Communist Party leadership has made it clear that expression is not to be as free as in the past few months.

A "public notice" circulated quietly a few days ago prohibits slogans, wallposters, publications and photographs that oppose socialism, proletarian dictatorship, party leadership or Marx-Lenin-Mao Tse-Tung thought.

An announcement printed on the front page of the local newspaper Peking Daily yesterday called on the public to help police enforce the rules and warned that violators faced "physical labour, education and discipline."

The measures, which the paper said had been adopted two days ago by the Peking Revolutionary Committee (city council), followed similar steps by Shanghai authorities earlier this month.

Demonstrations are to be supervised by police and disturbances in Government institutions are forbidden.

The new moves are a tough suppression of the wave of liberalism which has gathered strength in Peking since last year.

THE ARAB LEAGUE BOYCOTT

Egypt in political isolation

BY OUR CAIRO CORRESPONDENT

POLITICAL isolation, including the removal of the Arab League headquarters to Tunis, is likely to face Egypt more than the economic sanctions passed by the Arab League in Baghdad. Egypt's trade with the Arab world accounts for only about 6 per cent of its total trade, and an oil boycott would be ineffective because Egypt is almost self sufficient in oil.

Calls to withdraw Arab bank deposits and public funds to affect Arab-financed ... projects in Cairo ... Libya ... 28 per cent stake in the Arab International Bank, the oldest offshore bank in Cairo, even though it fought a bloody four-day war with Egypt in July 1977 and has had no diplomatic contacts since.

Kuwait, Bahrain and Saudi Arabia yesterday announced that their ambassadors were being withdrawn from Cairo and the Tunisian ambassador unexpectedly left for home.

More problematic is the fate of $2,000m of Central Bank Deposits held by Kuwait and Saudi Arabia in Egypt. Attempts to withdraw these funds before time would be stoutly resisted by the Egyptian authorities.

Meanwhile Cairo is preparing to greet Mr. Menahem Begin, the Israeli Prime Minister, who is due here today on a 24-hour visit. Israeli officials have ... to "keep the visit low-key" ... reference ... Sadat's problems with the rest of the Arab world.

Mr. Begin will not address the People's Assembly as originally hoped.

Anthony McDermott adds from Damascus: Syrian Government officials yesterday welcomed the Arab League resolutions but defined them only as a required minimum, as provided expressly in the clause permitting each country to do more if it wants.

Arab diplomats here said that Syria had gained time in which to concentrate on isolating Egypt while trying to avoid a military confrontation with Israel.

They were happy that Saudi Arabia's agreement to the boycott could provide a potential link with the U.S. and that this show of Arab support reduced Syria's political dependence on the Soviet Union.

Mr. Nasser Kaddour, the deputy Foreign Minister, confirmed that Syria was considering withdrawing its 26,000 peace-keeping troops from the Lebanon. There is concern here that Israel might provoke a confrontation in Lebanon with Syria, to test Egypt's adherence to the treaty.

Nigeria sets tight budget line

By Our Lagos Correspondent

NIGERIA'S MILITARY government has prepared a Naira 9.5bn (£7.48bn) budget for the financial year which started yesterday, providing the economic guideline for the elected civilian government due to take over in October.

As anticipated, Lt. Gen. Obasanjo, the Head of State, had little comfort for the few optimists who had hoped for an easing of the tight economic controls introduced in the past couple of years. Four more items—artificial flowers, fireworks, shoe uppers and toothpaste—were added to the already long list of prohibited imports and an additional 25 commodities were placed on the schedule of those requiring import licences — which effectively means an extension of the ban.

The National Petroleum Corporation jumped to the top of the line of beneficiaries from capital expenditure allocations. It takes Naira 1bn from the total of Naira 6.6bn, a figure which was slashed from Ministry and government agency requests for Naira 13bn. Following the NPC came the Ministry of Works (Naira 886m).

The anti-inflationary packet includes an extension of the two-year-old wage freeze for all but the lower income group, an end to car loans and basic allowances, and a ban on football pools and casinos.

Gen. Obasanjo blamed the 1974 pay awards, which provided for massive salary increases in some cases back-dated, for years of high inflation.

Uganda rebels 'set to take Kampala despite reversals'

BY MARK WEBSTER IN NAIROBI

UGANDAN EXILE forces said yesterday that they were still in a position to take the capital Kampala, despite confirmed reports that they had been driven back to about 20 miles from the city.

Diplomats in Kampala said Libyan soldiers supporting President Amin had apparently spearheaded the assault on the Tanzanian-backed invasion force, which had dug in only six miles from Kampala and four miles from Entebbe Airport.

Residents in the capital said shelling could again be heard to the south of the city after two quiet nights. Diplomats here said that even though the invasion force had been pushed back, Kampala should still be within reach of their 122mm long-range artillery.

The Uganda National Liberation Forces (UNLF) denial of the defeat is being treated with scepticism in Nairobi, because the once heavy shelling of Kampala stopped at about the same time as the Ugandan Government claimed its victory.

Iran votes for Islam republic

TEHRAN—Ayatollah Ruhollah Khomeini announced yesterday that Iranians had voted "unanimously" for the transformation of the nation into an Islamic republic, according to the state radio, AP reports from Tehran. He decreed that April 1 henceforth be known as "Republic day" in honour of the result of the nation's referendum.

Namibia talks start

Mr. P. W. Botha, the South African Prime Minister, and Mr. R. F. Pik Botha, the Foreign Minister, will hold talks today with the South Africa-sponsored constituent assembly in Namibia to decide whether or not finally to abandon the western efforts for an internationally-acceptable settlement in the territory, Quentin Peel writes from Johannesburg.

Bhutto 'resigned'

Mr. Zulfikar Ali Bhutto, the former Pakistan Prime Minister, was yesterday reported resigned to his fate on the gallows—despite pleas for mercy from a former Ministerial colleague, Reuter reports from Islamabad.

Chirac re-elected as Gaullist party president

BY ROBERT MAUTHNER IN PARIS

M. JACQUES CHIRAC was re-elected President of the Gaullist RPR Party on Saturday at an emotion-charged national conference during which he strongly attacked both the Government's economic policies and the Common Market.

The former Prime Minister, who resigned in 1976 after policy differences with President Giscard d'Estaing, was the only candidate running and was re-elected by 97 per cent of delegates' votes.

M. Chirac was particularly scathing about the way the European Community is currently functioning.

The European institutions had proved to be impotent both in dealing with internal community problems and with threats from outside. The Brussels Commission, according to M. Chirac, had refused to take effective measures to solve the crisis of the steel industry. It had also stood by powerless while certain of France's partners—a clear reference to the UK—had blocked common decisions.

Referring to the French Government's industrial restructuring schemes, particularly the reorganisation of the steel industry, M. Chirac said that the authorities had acted much too brutally. While it was normal that in a modern economy certain necessary adjustments had to be made, it was unjust and shocking that entire regions should be victimised and their workers reduced to a state of despair.

If the Government, which is dependent on Gaullist Parliamentary support, had gone too far in its industrial reconversion policies, it had been much too restrictive in its general economic policies, M. Chirac said.

U.S. airline stops flights

By Stewart Fleming in New York

WIDESPREAD disruption is threatened to air travellers across the United States as a result of a decision by United Airlines to cancel all flights until April 9. The nation's largest carrier takes an average of 130,000 passengers a day to 110 cities.

Some 18,600 mechanics, members of the International Association of Machinists and Aerospace Workers, went on strike on Saturday over a wage claim. Although United has offered a 30 per cent increase over three years, the workers want an unlimited cost of living protection clause.

The 30 per cent increase, well above the Carter Administration's anti-inflation guidelines, is allowed because of an earlier settlement in the airline industry, before the wage guideline policy came into effect.

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Brazil concludes new oil supply deal with Iran

BY DIANA SMITH IN RIO DE JANEIRO

THE NATIONAL Iranian Oil Company (NIOC) will ship over 4m barrels of oil to Brazil early this month.

The consignment is part of a revised contract between Brazil's oil monopoly, Petrobras, and NIOC for supplies of 200,000 barrels a day until the end of this year. Last year, Petrobras imported 150,000 b/d from the NIOC, then Brazil's third largest foreign supplier of crude.

The political crisis in Iran placed severe strains on Brazil's oil stocks which, by early March, were down to 40 days' forward supplies. Thus, a new agreement with NIOC was of the utmost urgency.

While several industrialised nations faced the risk of losing oil supplies from Iran, Petrobras had a relatively strong bargaining point—it had never used intermediaries in its trading with Iran and always dealt directly with the NIOC.

This point appears to have been appreciated by the NIOC since not only did it agree to resume and, in fact, increase oil shipments to Brazil but, after last week's OPEC meetings, Irani officials hinted that Brazil would be one of the few countries allowed to purchase Iranian oil at less than $15 a barrel.

While the deal with Iran has eased the strain on Brazil's stocks, the financial strain of the general OPEC increases will do nothing to help an already-overburdened imports bill. Petrobras calculates that the increases will add a net $250m to this year's oil imports, bringing the gross imported crude bill to close on $5bn in 1979.

With this extra onus, Brazil's hopes of achieving a trade surplus this year appear to be dashed, since the extra cost of oil goes hand in hand with a series of agricultural disasters that will cut into foodstuff exports and require higher foodstuff imports.

ENI visit to Mexico

BY RUPERT CORNWELL IN ROME

SIG. GIORGIO MAZZANTI, the new president of ENI, the Italian state hydrocarbons agency, is currently on a trip to Mexico to sound out the possibilities of securing future and supplies from what is shortly expected to become one of the world's leading oil exporting nations.

The trip of Sig. Mazzanti, who is accompanied by Sig. Enzo Barbaglia, president of the group's refining offshoot AGIP, follows similar visits to Libya, Iraq and Iran since he took over as head of the group two months ago.

It was reported here that one of the aims of his trip will be to explore whether scope exists for contracting for oil imports in exchange for supplies of Italian know-how and equipment to speed the development of Mexico's energy industry.

Sig. Mazzanti will be seeing senior officials at Pemex, the Mexican state oil corporation. Only last week Pemex released new estimates suggesting that the country's potential reserves could top 200bn barrels against the current proven level of 41bn barrels.

Italy, as one of the Western nations most dependent on oil imports, badly needs to ensure both secure supplies and additional outlets for its exports. The latest round of OPEC price increases are estimated to add a further L1,000bn (£580m) to its annual oil bill, and also give a further push to inflation. There is again renewed speculation in Italy about an increase in fuel prices (including petrol) and/or direct measures to curb energy consumption. However the picture is complicated by the likelihood of early general elections here.

£200m Indian engines plant

BY K. K. SHARMA IN NEW DELHI

PLANS FOR a major plant costing Rs 3 bn (about £200m) capable of producing 100,000 car engines a year have been formulated by India's Ministry of Industry which is now in the process of restructuring the motor sector.

The plans, which will now go to the Cabinet, envisage the import of foreign technology for the manufacture of engines which could then be farmed out to the car companies which currently produce three obsolete models that are nearly 20 years old.

Mr. George Fernandes, Minister of Industry, recently sought to nationalise the motor industry on the grounds that it has made no technological effort to improve its products. His proposal is now being examined by a Janata Party Committee and will then be processed by the Government.

The present plan for making 100,000 engines in the public sector is thought to be part of the restructuring of the industry which will also involve plants making commercial vehicles. These include Ashok Leyland, which plans to import new technology from its principals in Britain, Tata Engineering and Locomotive Company (Telco), Mahindra and Mahindra (producers of jeeps) and others.

The form of the restructuring has still to be decided by the Ministry of Industry which is keen to introduce fuel-economy engines for all units, hence the proposal that the public sector plant be based on foreign technology. The plan envisages the export of 40,000 engines annually to markets in South-East Asia and the Middle East.

Talks on the new engine project have been held mainly with French companies like Peugeot and Citroen but proposals from others are being sought before a final decision is taken.

But plans to attract foreign collaboration for using India as a base for export to developing countries are not making progress, even though labour costs are cheap here and there are already several plants making components for foreign companies which have been involved in discussions feel that costs in India would still be too high for the proposed plants to be competitive with Japanese car companies.

Leading British industrialists to visit S. Korea

BY MARGARET HUGHES

A TEAM of 15 leading British industrialists, led by Sir Kenneth Keith, chairman of Rolls-Royce, is to visit South Korea from May 7 to 11.

This is the first time that such a high level mission from Britain has visited South Korea and reflects the growing importance of this country as an export market. The British Overseas Trade Board said it had arranged the mission to demonstrate that British industry was interested "at the highest level" in developing trade and industrial co-operation with South Korea.

During the five-day visit, mission members representing such companies as the Dowty Group, Hawker Siddeley, Hill Samuel, ICI, Lazards, NEI, and RTZ will have meetings with Government ministers and senior businessmen. The BOTB is also arranging in conjunction with the Machine Tool Trades Association an all-British machine tools exhibition in Seoul from May 21 to 26. More than 50 companies will be participating. The BOTB is sponsoring a further 15 trade missions to South Korea later this year.

Britain increased its exports to South Korea by 70 per cent to £130m. Despite this success, Britain's share of the market decreased from 1.4 per cent in 1977 to 1.25 per cent in 1978 (first nine months). It is faced with fierce competition not only from the traditional suppliers—Japan and the U.S.—but from West Germany and France.

The Department of Trade is anxious that British companies do not lose out in this important market where the GNP (at current prices) has risen from $17.2bn in 1974 to $39.3bn last year and a forecast $47.5bn this year. It points out that the South Korean Government is anxious to decrease its dependence on its traditional suppliers.

S. Korea Survey. Pages 15 to 26

Danes choose Olivetti

BY HILARY BARNES IN COPENHAGEN

THE DANISH savings banks have announced that they will buy about 1,500 computer terminals from Olivetti. The terminals are for delivery in 1981-83. The contract will be worth at least Nkr 250m (about £23.67m)

The decision by the Danish savings banks is a blow to the hopes of Datasaab, the Swedish manufacturer, which is half state owned. The Nordic savings banks jointly bought the first generation of terminals from Datasaab.

The Danish savings banks however have decided to invest in the second generation some years ahead of savings banks in Norway, Finland and Sweden.

World Economic Indicators

UNEMPLOYMENT

		Mar. '79	Feb. '79	Jan. '79	Mar. '78
UK	000s	1,350.4	1,362.6	1,339.2	1,400.0
	%	5.7	5.7	5.6	5.9
		Feb. '79	Jan. '79	Dec. '78	Feb. '78
W. Germany	000s	1,134.0	1,171.4	1,006.7	1,224.3
	%	5.0	5.1	4.4	5.4
U.S.	000s	5,881.0	5,883.0	6,012.0	6,090.0
	%	5.7	5.8	5.9	6.1
Holland	000s	211.7	211.5	210.5	202.7
	%	5.1	5.3	5.2	5.1
		Jan. '79	Dec. '78	Nov. '78	Jan. '78
Japan	000s	1,270.0	1,160.0	1,160.0	1,260.0
	%	2.06	2.20	2.31	2.08
Belgium	000s	303.1	300.9	297.1	299.5
	%	7.6	7.5	7.5	7.5
France	000s	1,356.2	1,256.4	1,215.3	1,027.7
	%	5.9	5.5	5.3	4.7
		Oct. '78	July '78	Apr. '78	Oct. '77
Italy	000s	1,651.0	1,658.0	1,450.0	1,598.0
	%	7.5	7.5	7.2	8.0

Liberians attack France over ship boycott incident

BY IAN HARGREAVES

LIBERIA has protested strongly to the French Government about its failure to interevene in a ship boycott incident reminiscent of the Globtik Venus affair two years ago.

According to the Liberians, the French police refused to implement a High Court injunction demanding the release from Boulogne Harbour of a vessel flying the country's flag.

So far, the French Government has not responded to the Liberian request for an explanation of the incident.

The trouble began at the end of February when, following contacts between the ship's Indian crew and representatives of the International Transport Workers Federation (ITF), the seamen came out on strike for ITF pay levels.

Backed by ITF officials, they blockaded the Greek-owned 8,530 grt freighter the Global Med, and at one stage locked the captain and senior officers in a cabin, allegedly without food and water.

The owner, Trans-Orient Freight Transport Corporation, refused to negotiate with the mutineers, and visits to Boulogne by Mr. George Cooper, Liberia's deputy maritime commissioner, a senior Indian union official and an Indian diplomat from London failed to resolve the matter.

A week ago, the ITF says the owner tried to storm the ship. Tear gas was used by police and one union official was injured.

Mr. Cooper says the owner was simply trying to effect a change of crew in order to get the ship out of port.

On Friday, the shipowner's agent agreed to negotiate with the ITF in Boulogne and has, the ITF says, undertaken to provide back pay totalling $116,126 to cover the difference between the 32 members' contract rate and ITF pay levels during their period of nine months' service.

The crew was to be repatriated to India, at the owner's expense, over the weekend and a new crew will, says the ITF, be employed at ITF rates. The ship is expected to sail from Boulogne this week.

Mr. Cooper said his Government was angry at another example of Liberia's legitimate rights being ignored by the French authorities. France is known for its extremely hard line against flag of convenience shipping operations.

The owners' agent yesterday could not confirm the pre-strike level of pay of the Indian ratings, but the ITF said that basic wage was around £50 per month, with an effective rate of about twice this amount.

In the past few months, Liberia has been engaged in a vigorous diplomatic campaign to safeguard the position of its fleet—the largest in the world—against ITF attacks.

The ITF has said that it will step up the attacks, partly to counter this diplomatic offensive.

SHIPPING REPORT

OPEC rises dampen tanker rates

BY OUR SHIPPING CORRESPONDENT

LAST WEEK'S OPEC price increases had a predictably dampening effect on the oil tanker market, especially in the Gulf.

The Harley Mullion weekly index dropped sharply from worldscale 158 to WS148 and in all the major loading areas except West Africa there was an excess of tonnage compared with available cargoes.

Because of the availability of some cargoes at the old oil prices, some shipowners were able to obtain contracts at well above the going rate, but the overall tone of the markets was dull. The rate for a VLCC loading in the Gulf was down to WS32 by the end of last week.

But with OPEC price-fixing out of the way, tanker brokers are predicting a steadier level of demand for vessels, although rates will continue to depend upon the ability of owners to schedule ship movements so as to avoid long queues of ships in particular areas.

The evidence of the last six months is that they are succeeding to a surprising extent, with the help of their Oslo-based association Intertanko, in achieving just that.

Another sign of an underlying improvement in the market was the report last week that a Swedish operator has taken a 5-year charter on a 262,000 dwt vessel at $1.525. An even larger Danish ship of 332,000 dwt was fixed for one year at WS32.5, indicating an expectation of slightly improving markets.

In dry cargo trades, the best indication of buoyancy is the difficulty in obtaining details of charters because of secrecy clauses insisted upon by the charterers.

There have been especially sharp improvements in grain business out of Argentina, where rates for a 30,000 dwt ship on the Far East voyage is more than 30 per cent better than rates paid in January. This represents a useful gain, even allowing for higher marine fuel charges.

There is also a strong level of inquiry for period charters to counterbalance the effect of volatility in tanker markets, which normally have a marked effect on the rates obtainable by larger bulk carriers.

The most important long-term indicator of all in shipping, the value of second-hand vessels, continues to be positive.

The London-based Faros Shipping company, for example, was able to conclude the sale of the 66,000 dwt bulk carrier Agememnon, built in 1968, at $6.15m. The same ship was available at $5.8m a month ago.

Likewise in tankers, a small 19,000 dwt vessel built 18 years ago found a lot of bidders and went for $2m, which broker Galbraith Wrightson says is $0.5m more than the same vessel would have been valued at six months ago.

The sales lists do, however, continue to indicate the diminishing fortunes of P & O, Britain's biggest shipping company, which last week sold three 12-year-old cargo liners for $2m each to Far East buyers.

UK NEWS

Reactor turbine system 'chosen'

A REPORT by the Central Policy Review Staff on the choice of turbine for the advanced gas-cooled reactor nuclear power stations at Heysham and Torness is thought to be completed, and to have come down in favour of the "six-exhaust" system.

The review staff was appointed by the Prime Minister to look at the choice of systems last year, largely at the instigation of the General Electric Company (GEC), one of the two UK turbine manufacturers.

The six-exhaust system is the preferred choice of both the Central Electricity Generating Board, which will build Heysham, and the South of Scotland Electricity Board, which will build Torness. Both have said so strongly to the Review Staff in their evidence.

However, it is not so clear which manufacturer will profit from the decision. Both GEC and Northern Engineering Industries make four-exhaust and six-exhaust systems, and both have been asked to submit tenders.

Technical

Northern Engineering has claimed that it has a superior six-exhaust technology, and believes it would be the favoured supplier for all four sets for the two stations. The sets are worth about £140m.

GEC has consistently refused to comment on the issue, saying the argument is a highly technical one.

While the Generating Board has made it clear to the Review Staff that it prefers six-exhaust technology, it has not so far as is known, made it clear which manufacturer it prefers. However, its general wish to see rationalisation in the industry—with the Parsons turbine division of Northern Engineering merging with GEC, and the Clarke Chapman boiler-making division merging with Babcock and Wilcox—may influence its choice.

Informal talks between Babcock and Northern Engineering-Clarke Chapman have continued even after a formal breakdown of discussions last year, though no agreement yet seems to have been reached.

More oppose mining complex

BY JOHN LLOYD

OPPOSITION TO the National Coal Board's plans to develop a 10m tonne a year mining complex in the Vale of Belvoir in Leicestershire grew over the weekend as anti-development groups appealed to Nottinghamshire and Lincolnshire county councils to join Leicestershire in opposing the NCB's plans.

Mr. Chris Tizzard of the Vale of Belvoir Protection Group said: "We are delighted with Leicestershire's firm and uncompromising statement to use all possible resources to oppose the NCB. We would now hope that neighbouring county and district councils in Nottinghamshire and Lincolnshire will feel free to take similar action."

Last week, Leicestershire council adopted its chief planning officer's recommendation that the Belvoir pits should be opposed both because the the NCB had not proved a need for the coal, and because the costs to be borne by the council, for the provision of extra houses, roads, educational and social facilities, would be high.

The anti-development groups have now collected about £52,000 for their defence fund, to defray the costs of the inquiry to be held later this year. They have retained the services of Mr. Gerald Manners, a reader in Geography at London University who has developed a case against the NCB's general development plan, Plan for Coal, and will also hire mining consultants and geologists.

The NCB thus faces the local groups, the National Farmers Union and Leicestershire County Council, with the possibility of other county councils and other environmental groups declaring their opposition as well.

However, the board believes that recent events—including the crisis in Iran, the rise in the oil price and increased fears over nuclear safety—will sway public opinion its way.

It also believes that without new, highly mechanised colliery developments like Belvoir, and Selby in Yorkshire, it will be unable to approach its production target of 170m tonnes a year by the end of the century, and, therefore, be unable to supply oil from coal and substitute natural gas as natural oil and gas supplies run out.

'Rising pound a threat to exports'

BY PETER RIDDELL, ECONOMICS CORRESPONDENT

THE HIGH current value of sterling is Britain's biggest economic problem at present, according to a major new forecast from a group of Cambridge economists.

In the short-term, there should be a neutral budget, whatever the political circumstances, because, apart from oil output, the economy is moving into a mild recession and a tough budget would only make it worse.

These projections come from the Cambridge Econometrics which uses a forecasting model developed by the Cambridge Growth Project, a university team under the direction of Professor Sir Richard Stone and Dr. Terry Barker.

The model differs from many others because it is designed to project the development of 40 individual industries and the economy over a period of 10 years or more.

The Growth Project team is separate from what is known as the New Cambridge School under Mr. Wynne Godley at the Department of Applied Economics. Where they favour depreciation of the pound as one response to Britain's economic problems, Mr. Godley's team has called for import controls.

The Cambridge Econometrics long-term forecasts show "measured optimism" provided the pound does not remain as high as it is today. "A strong pound would hit export competitiveness and, in the mid-1980s, turn potential trade surpluses of £2bn into deficits."

However, it is argued that the "spread of the so-called Dutch disease is slow, because industrial contract prices are slow to react to currency changes and actual buying behaviour changes more slowly than the contracts.

"The effects of an over-valued currency can still be felt six years later," the group warns, and among the industries which would be worst affected are steel, paper and board, electrical and instrument engineering, vehicles, glass, chemicals and textiles.

The basic forecast projects a bright future for many of these sectors provided there is a managed depreciation of sterling.

Most sectors are expected to contract this year and grow faster in the 1980s than they have through the last decade.

Total output, as measured by Gross Domestic Product at 1975 prices, is expected to grow by 0.8 per cent this year following a 3 per cent rise in 1978. Indeed, excluding North Sea output and investment, there may be a decline of 0.7 per cent, reflecting stock reductions.

Over the next few years the growth of total output is expected to range between 1.7 and 2.3 per cent year, mostly at the bottom end of the spectrum with a slightly faster expansion of real consumer spending.

Cambridge Econometrics, PO Box 114, 21, St. Andrew's Street, Cambridge CB2 3RW.

Public spending reviews urged

BY OUR ECONOMICS CORRESPONDENT

OVERALL REVIEWS of public spending should be undertaken, perhaps every four to six months, in order to assess the effects of cash limits on previous expenditure decisions.

This is urged—in a pamphlet today from the Policy Studies Institute—with a view to using what limited freedom of action exists during a financial year to ensure that the resulting spending pattern is as near as possible to that desired.

The institute, an independent research body, commissioned a study on the management of public expenditure from Mr. Peter Else and Mr. Geoffrey Marshall of the University of Sheffield.

They argue that these regular reviews would allow account to be taken of priorities and the potential costs of a lower level of expenditure in real terms, and whether, in cases where price movements are more favourable than anticipated, it would be desirable and feasible to allow a rise in expenditure in real terms. These reviews should be published.

"The Management of Public Expenditure," by Peter Else and Geoffrey Marshall, price £3.50 from Policy Studies Institute, 1-2, Castle Lane, London SW1E 6DR.

Stockbrokers show wary optimism

BY OUR ECONOMICS CORRESPONDENT

A LARGE new batch of pre-Budget circulars from City stockbrokers shows that most are cautiously optimistic about financial and mandatory prospects in 1979-80.

In the first issue of a new quarterly publication entitled Financial Analysis, L. Messel argues that, assuming £8bn public sector borrowing in 1979-80, the growth of sterling M3, the broadly defined money supply, should be 7 per cent, against 9 to 10 per cent in 1978-79.

On that basis, interest rates should fall, with Minimum Lending Rate in single figures within 12 months, while sterling should remain firm.

In their latest monthly forecast, Phillips and Drew suggest that the current account should be in surplus by between £500m and £1bn this year.

Construction output 'likely to stagnate'

BY MICHAEL CASSELL

CONSTRUCTION OUTPUT is expected to stagnate this year, although the economy as a whole will grow, the National Council of Building Material Suppliers says.

Its latest forecasts suggest that the outlook for public-sector housing remains one of the most gloomy. The level of approvals for building new public-sector homes is at its lowest for at least 20 years and housing starts may in the next three years be expected to fall to unprecedentedly low levels.

According to the council, public-sector starts will be limited to about 100,000 in the next three years, partly because Labour and Conservative-controlled councils are reluctant to embark on new housing schemes and partly because of the fresh emphasis on rehabilitation.

The council sees a better outlook for private house building, although it emphasises that prospects for the availability of housing finance remain uncertain and it seems unlikely that mortgages will be as readily available as early last year. It nevertheless expects private house-building to continue roughly at last year's levels.

The building material producers do not believe that the hoped-for recovery in public-sector construction work generally will materialise, and expect a slight decline in output until 1981.

Private industrial work, running high last year, is expected to continue encouragingly this year, although the material producers point out that orders are falling off and output will do likewise.

Private commercial work, another bright spot for construction last year, is also expected to have another successful period this year and next, but growth will cease in 1981.

Government housing estimate is 2m short

BY JANICE MACFARLANE

COUNCIL HOUSE construction is at its lowest since 1945 with more than a million people on waiting lists—yet the Government is 2m short in its estimate of English families in need of a home or housing repairs, according to Roof, Shelter's housing magazine.

The magazine states today that not only is the Government's definition of the "hard core" housing problem is marked underestimate, but its projections of investment in the recent Public Expenditure White Paper will leave much of that hard core untouched a decade from now.

It also points out that local authority estimates of the housing shortage are twice as high as those projected by the Department of the Environment—for although the department estimated a surplus of 106,000 houses in London by 1982, the local authority projection was a 128,000 shortage.

The reason for the discrepancy, according to Roof, is that the Government assumes most people who share a home do so willingly, and that there is no housing need for families defined as "overcrowded."

The Environment Department had also failed to take into account the fact that many houses are falling into disrepair, said Roof, although about 120,000 houses a year need repairs costing more than a £1,000.

Counting housing shortage and unsatisfactory dwellings together, the Government estimates that 1½m English households are in housing need while Roof puts the figure at more than 3½m. It concludes that the improvement in conditions which took place during the early 1970's will not be continued into the 1980's.

London 'must tempt more international companies'

BY PAUL TAYLOR

LONDON'S POSITION as an important commercial and financial centre in the European Community should be the basis for a "wholehearted campaign" by the new Government and the local authorities to encourage more international companies to establish offices in London, the London Chamber of Commerce and Industry says in a policy statement today.

It describes active encouragement of commerce and industry in London as an essential prerequisite if the capital is to play its proper role in Britain's economic recovery.

Investment in London, it says, often leads to investment elsewhere in the UK, a fact not always remembered in the past when attempts to promote other regions at London's expense have led to serious industrial and social difficulties in the capital while doing little to help the regions.

The chamber, in a list of priorities for an incoming Government, suggests abolishing the Office Development Permit system and reducing controls on change of use for buildings.

It urges encouragement for companies that wish to remain in London to modernise and expand their facilities. National and local government must ensure that such facilities are made available primarily from the private sector.

The chamber repeats its assertion that Government policy should allow designated areas of London, such as Docklands, to have access on equal terms to the opportunities enjoyed by assisted areas.

Its statement also emphasises that if London is to be allowed to realise its full potential, a series of inter-related policies will have to be put into action. The chamber singles out for urgent consideration education, telecommunications, transport, housing, planning and financing.

Production management 'lacks qualified people'

BY JOE RENNISON

MANUFACTURING industry suffers from a marked lack of well-qualified and ambitious people in production management which is one of the reasons for that occupation's "malaise," says a report published today.

The report, by the British Institute of Management, adds that some industries are better than others in their employment of production managers. Chemical-based industries, especially food, drink and tobacco, chemicals and allied products, are ahead of the engineering-based industries.

It is suggested that this may be so because more companies in the process industries are science-based and owned outside the UK than in the manufacturing industries.

Traditional career patterns typified by long service in production, limited experience of other functions and modest aspirations tend to prevail in industries such as metal manufacture, mechanical engineering, vehicles, aerospace and textiles.

"Such career patterns together with lower educational standards and fewer professionally qualified production managers, are found more in British-owned than foreign-owned companies."

Contemporary manufacturing industry is making increasing technical, economic and social demands.

But "attitudes in industry to the nature of the graduate population do not appear to have changed so quickly as the nature of the graduate population itself has changed."

The report recommends four main areas for improvement: upgrading the production manager, improved career structures; better education and training; and more research.

Chrysler adds to Alpine and Avenger ranges

A NEW version of the Alpine car range and two new Avenger models are announced today by Chrysler UK. All will be available only in limited numbers.

The new Alpine Sunseeker is based on the Alpine GL 1442cc but has several extras as standard, including a sun roof and tinted glass. The cost is £4,223.

Based on the Avenger GL 1600cc model, the new Avenger GL 1600, four-door Special saloon and LS 1600 Estate also have special features in their specification.

The price of the GL 1600 Special saloon is £3,478 and the LS 1600 Special Estate costs £3,382.

● The price of a new Aston Martin has gone up by £4,900.

The specialist car manufacturer yesterday announced a 13 per cent increase on three cars in its range.

The £4,900 rise, with which drivers could buy a new family car, goes on the futuristic Aston Martin Lagonda—pushing it up to £37,500.

When the car was unveiled in late 1978, it had a price tag of £32,500. The first increase added nearly £9,000.

But Aston Martin said it did not think the rise would hit sales—presently one a week.

Increases of £3,000 go on the V8 which costs just less than £27,000, and on the V8 Vantage, which now costs £29,998.45.

Rolls may make Army engines in U.S.

By Lynton McLain

ROLLS-ROYCE MOTORS has started talks with the U.S. Teledyne Continental Motors Corporation about a possible licence agreement to make Rolls-Royce military diesel engines in the U.S.

The companies have had a manufacturing link for 12 years. Rolls-Royce makes Teledyne's small Continental series of light aircraft engines in Britain under licence.

The proposed venture would open the way for sales of Rolls engines to the U.S. armed forces for the first time. Manufacture would eventually be concentrated in America.

Mr. David Plastow, managing director of Rolls-Royce Motors, which makes military engines at Shrewsbury, meets 50 U.S. defence officials and industrialists from Teledyne tomorrow. But he is realistic about chances of instant success.

He wants the Pentagon to consider using a Rolls-Royce diesel as the alternative back-up engine for the XM-1, the next generation of U.S. tank, which now is designed round a U.S. gas turbine from Avco-Lycoming. But Teledyne, its would-be partner, is also producing a diesel, its 1360 model, for the XM-1.

Lost Iran order

In particular Rolls-Royce wants to find a new use for its CV12 military diesel engine. This was designed with funds from the Ministry of Defence for the Shir version of the British Chieftain main battle tank, destined for Iran before the new Islamic Government cancelled the entire order for 1,350 tanks.

No tanks were delivered, although about 100 of the original Shir I, fitted with the Rolls engine, were completed by the Royal Ordnance Factory at Leeds. Engines for the rest of the tanks have not been made, but Rolls wants to recoup, for the Defence Ministry, the development funds.

Defence officials in Britain are working on the design of the next generation tank, the MBT 80, and there is strong pressure from the U.S. Avco-Lycoming corporation to get its turbine engine accepted for this.

Rolls-Royce wants the MBT 80 to be powered by its CV12 engine, and the U.S. campaign is certain to focus attention on the engine's potential.

The company will make its final presentation to the Defence Ministry within two months; the officials will decide finally the choice of engine in the third quarter of this year.

£5.75m boost for Welsh industry

WELSH INDUSTRY is to receive £5.75m in loans from the European Investment Bank, the long-term finance institution of the European Community. Three companies share the money to help boost industrial projects.

Tetra Pak Rausing is to get £2.6m for seven years to build a factory at Wrexham processing carton paper for food packs, and will initially provide 50 jobs, with 60 more foreseen.

£2.6m for 10 years goes to Tockwool to build a mineral wool factory near Bridgend, Glamorgan. This should create some 200 jobs.

Blaenau Plastics receives £850,000 over seven years for a new factory at Blaenau Ffestiniog producing plastic components. It should be fully on stream by 1981, and create about 110 jobs.

The loans have been made in various foreign currencies, but each company has obtained cover against exchange rate fluctuations.

Winter costs National Bus Company £12m

By Janice Macfarland

THIS YEAR's weather has left the National Bus Company a legacy of problems—a bill of at least £8m for engineering repairs, a further £4m in lost fares, and disrupted services in many of its 30 subsidiary bus companies.

About a third of NBC's 18,000 buses were damaged either by bad weather or accidents during the first three months of the year and today the company appealed to passengers inconvenienced by this to understand their problems.

"We did our best to keep our bus and coach services going in the Arctic weather and are still striving to provide a complete service," said Mr. Robert Brook, NBC's chief executive. "Our maintenance staff is working flat out to put things right but it cannot be done overnight. We ask passengers to bear with us."

200 lose jobs

NEARLY 200 employees at the Baxter's meat pie company, Northampton, to lose their jobs because a subsidiary company, Brooks Farm Frozen Food, also of Northampton, has been forced to close.

COMPANY NOTICES

BARLOW RAND LIMITED

(Incorporated in the Republic of South Africa)

DECLARATION OF PREFERRED ORDINARY DIVIDEND NO. 2

NOTICE IS HEREBY GIVEN that preferred ordinary dividend No. 2 of 18 cents per preferred ordinary share has been declared, payable in the currency of the Republic of South Africa, to holders of preferred ordinary shares registered as such at the close of business on 20 April, 1979. [illegible]

Registered Office: Barlow Park, Katherine Street, Sandton 2146, South Africa. P.O. Box 78-2248, Sandton 2146, South Africa.

Transfer Secretaries: Rand Registrars Limited, 2nd Floor, Devonshire House, 49 Jorissen Street, Braamfontein 2001, South Africa (P.O. Box 31719, Braamfontein 2017, South Africa).

United Kingdom Registrar: Lloyds Bank, Limited, Registrar's Department, The Causeway, Goring-by-Sea, Worthing, West Sussex BN12 6DA, England.

By Order of the Board
W. C. WARRINER
Group Secretary
30 March, 1979

COMMERZBANK AKTIENGESELLSCHAFT

London Deposit Certificates—Units of £M.10

NOTICE IS HEREBY GIVEN by S. G. Warburg & Co. Ltd., as Depositary [illegible]

S. G. WARBURG & CO. LTD., as Depositary.
2nd April 1979.

SOCIETE NATIONALE INDUSTRIELLE AEROSPATIALE

10¼% 1975-1985 FF.100,000,000

[illegible]

KREDIETBANK S.A. Luxembourgeoise
April 2, 1979.

BANK LEUMI LE-ISRAEL B.M.

(Incorporated in Israel)

TO THE HOLDERS OF ORDINARY STOCK

NOTICE IS HEREBY GIVEN that an EXTRAORDINARY GENERAL MEETING of the Bank will be held at its Registered Office, 24-32 Yehuda Halevy Street, Tel Aviv, on Wednesday, 25th April 1979 [illegible]

RESOLUTIONS

[illegible]

By Order of the Board,
A. SULLAM, Adv. Secretary.
2nd April, 1979.

BANK LEUMI LE-ISRAEL B.M.

(Incorporated in Israel)

TO THE HOLDERS OF ORDINARY STOCK

NOTICE IS HEREBY GIVEN that the Twenty-eighth Annual General Meeting of the Company will be held at its Registered Office, 24-32 Yehuda Halevy Street, Tel Aviv, on Wednesday, the 25th day of April, 1979, at 10.30 o'clock in the forenoon, for the following purposes: [illegible]

By Order of the Board,
A. SULLAM, Adv. Secretary.
Tel Aviv.
2nd April, 1979.

BANK LEUMI LE-ISRAEL B.M.

ORDINARY STOCK

[illegible]

By Order of the Board,
A. SULLAM, Adv. Secretary.
24-32 Yehuda Halevy Street,
Tel-Aviv,
Israel.

THE "SHELL" TRANSPORT AND TRADING COMPANY LIMITED

PROPOSED CAPITALISATION ISSUE OF ORDINARY SHARES OF 25p EACH

NOTICE TO ORDINARY SHAREHOLDERS

[illegible]

By Order of the Board,
G. J. OKELL, Secretary.
Shell Centre,
London, S.E.1.
2nd April, 1979.

BOND DRAWING

THE COPENHAGEN COUNTY AUTHORITY (C.C.A.)

6½% 1968/1980 UA 10,000,000

[illegible]

THE TRUSTEE,
KREDIETBANK S.A. Luxembourgeoise.
Luxembourg,
April 2, 1979.

NOTICE OF RATE OF INTEREST

U.S. $25,000,000

BEARER DEPOSITARY RECEIPTS

Representing interests in a

FLOATING RATE CERTIFICATE OF DEPOSIT DUE 1983

BANCO UNION, C.A.

(A Venezuelan Corporation)

In accordance with the provisions of the Indenture of Trust and Deposit Agreement between Banco Union, C.A., and Citibank, N.A., Trustee and Depositary, dated as of April 1, 1978, notice is hereby given that the rate of interest has been fixed at 11-1/16th% p.a., and that the interest payable on the relevant interest payment date, October 1, 1979, against Coupon No. 3 to the Bearer Depositary Receipt will be U.S.$ 56.23 and has been computed on the actual number of days elapsed (183) divided by 360.

April 2, 1979

By: Citibank, N.A., London Reference Agent

CITIBANK

NEGIT S.A.

Société Anonyme
10A, Boulevard Royal
LUXEMBOURG
R.C. Luxembourg B 8 869

DIVIDEND NOTICE

Notice is hereby given that, pursuant to a resolution of the Annual General Meeting of Shareholders of NEGIT S.A. on 10th April, 1979, payment of US$ 0.11 per share will be made to shareholders registered on 13th March, 1979.

Dividend cheques will be mailed to registered shareholders.

Luxembourg, 19th March, 1979
The Paying Agent
Banque de Paris et des Pays-Bas
pour le Grand-Duché de Luxembourg

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Report may suggest further rises for top public servants

BY JOHN ELLIOTT, INDUSTRIAL EDITOR

EXTRA SALARY increases of between 5 and 10 per cent may be recommended for nationalised industry chairmen and other top public servants—who yesterday received rises ranging up to about 25 per cent.

The recommendation will be contained in one of three reports from official pay review bodies covering top salaries, the armed forces, and doctors and dentists.

Its objective will be to bring pay rises which were assessed last April into line with subsequent increases in inflation and in the pay of comparable occupations in the private sector.

The recommendations will be especially embarrassing for the Government following the industrial unrest among civil servants covered by general pay negotiations.

It is likely that the review bodies for the armed forces and the doctors and dentists will be *sent to the Prime Minister* before the General Election. But the top salaries report may not arrive until later in May.

Yesterday's rises were paid to the chairmen and board members of nationalised industries and other top public servants in the Civil Service, armed forces and the judiciary following last year's report of the Boyle review body.

Rises of about 25 per cent go to the chairmen of nationalised industries such as coal, *railways, electricity and gas,* increasing their salaries from around £27,000 to £33,500 a year.

Next April these chairmen will get £40,000. Following similarly staggered rises, the chairmen of the National Enterprise Board and the British Steel Corporation will have reached £45,000, while the chairmen of smaller bodies *such as the Welsh Development* Agency and the National Water Council will be on £25,000.

It is these salaries that the Boyle review body will be recommending should be raised so that the people covered do not fall too far below comparable salaries elsewhere. The last big rise given to the nationalised industry chairmen and board members was in 1972.

● The Government's official interpretation of a "top salary" was given as £40,000 a year in the Commons on Friday. In a written reply to a parliamentary question, Mr. Robert Sheldon, the Treasury Financial Secretary, said that a "typical top salary" was roughly eight times the average national wage. In 1976 the average top salary was £30,000, he added.

Wool chiefs seek supremo

Financial Times Reporter

A SUPREMO is to be appointed for the Yorkshire-based wool textile industry.

The post, which is being advertised at a salary of not less than £15,000 a year, is part of a re-organisation which the industry hopes will help boost it in changing trading conditions.

The new supremo, who will have the title of director-general, will be responsible for advising on policy and implementing the decisions of a policy board which is to be set up. He will be the spokesman for the industry, particularly in its dealings with the Government and Common Market officials.

The changes, expected to be put into effect later this year are a move to unify the industry's trade associations by merging them into a new federation or employers' organisation which will represent the interests of over 600 member companies.

It is felt that the restructuring will give the industry a more powerful body in its *efforts to prevent further erosion* of trade and create a climate for expansion.

Mr. Derek Bradbury, a leading member of the industry, said in Bradford: "Our objective is to strengthen the organisation of the industry in line with changing economic and commercial conditions."

NEWS ANALYSIS ● ROY HODSON REPORTS ON NATIONAL INDUSTRIES AT LOGGERHEADS

Problems still facing British Steel

IRON AND STEEL deliveries in Britain have still not returned to normal. The lingering effects of the severe winter and the road and rail strikes will be felt in the industry for weeks.

The impact upon distribution early this year has been sufficient to rob Sir Charles Villiers, chairman of the British Steel Corporation, of hopes that the concern's estimated £350m deficit in 1978-79 might be reversed in time to break even during 1978-80.

British Steel's hard-pressed management finds its attempts to drag the business back into profit, after four years of heavy losses, being threatened from, now, another direction.

The corporation's central strategy of concentrating iron and steelmaking upon the fewest possible low-cost coastal works, to keep costs down and profits on sales up, is being challenged by the coal lobby.

At issue is whether the corporation should have the right to import coking coal from Australia to get the best production from its new 10,000-tonnes-a-day *blast* furnace that will start production at Redcar in summer.

It is likely to be resolved at the Cabinet table rather than between British Steel and the National Coal Board. If a Labour Government is returned in May the coal lobby is expected to secure a ban on the coal imports.

The Redcar furnace is among the world's biggest, and twice as big as anything else in Europe. It involves an investment of £400m, the biggest single capital investment in iron and steel made in Europe.

Its function is to make some of the cheapest iron available to any steel company. In turn, that iron, fed to the steel furnaces, will reduce the cost of the corporation's steel and make a big contribution towards improving its competitive position at home and abroad.

British Steel's blast furnace performance does not compare well with those of other steel-producing nations.

In Britain, 590 kg of coke are needed to make a tonne of iron compared with 490 kg in West Germany, 450 kg in Holland, and only 430 kg in Japan. The new furnace, with its economies of scale, is intended to redress that imbalance.

The Redcar blast furnace will need 2.2m tonnes of coking coal a year. During its planning, a working party was formed, including representatives of the corporation and of the National Coal Board, to decide how the coal should be obtained.

The Board went ahead with schemes to increase its North-east coking coal output. To some extent it was frustrated by geological obstacles in the seams it wished to develop. However, it has spent £37m in pit development in the North-east and in the Kent coalfield. That investment, the Board says, is to meet a demand from Redcar.

The working party agreed upon the special blend of coking coal needed to run the new furnace properly.

The coal needs a closely defined reactivity in terms of its chemical qualities. It needs the physical strength as coke to take the weight of iron ore above it in the giant furnace.

In both areas the Board and British Steel agreed that they were moving into new territory as far as use of coking coal in *Britain is concerned.*

The working party decided upon the type of coking coal needed but failed to agree on how it should be supplied. The best blend appeared to be a mix of a quarter of home-produced and three-quarters of imported coal.

At that point, the two nationalised industries agreed to disagree as to how the coking *coal for Redcar should be provided.*

The National Coal Board said that it could provide enough varieties of British-mined coking coal to make a suitable blend equal to the mixture of home and foreign coals. British Steel, unimpressed, decided upon a compromise mixture of 45 per cent home coal and 55 per cent imported.

Two contracts have been signed between British Steel and the Australian coal producers. The first is for 300,000 tonnes of medium volatile coking coal each year until 1981. The second is for 250,000 tonnes a year for nine years. The prices are less than £30 a tonne.

The contracts give British Steel some of the best coking coal in the world. The experts do not quarrel on that. Moreover, the Australian prices are £10 a tonne less than the best prices offered by the NCB, which has to deep-mine its coal in difficult conditions.

British Steel maintains that its decision was not influenced by the lower Australian price. It says that it chose the coal on strictly technical grounds as the best raw material to run its new and complicated blast furnace in the most efficient way it knows.

There is much mystique and empirical lore about operating a 10,000-tonnes-a-day blast fur*nace. It is an operation on a* scale never previously attempted in Europe; even in Japan, experience is limited.

British Steel is naturally anxious to reduce the variables as far as possible before the furnace is lit. One area that it can control is the coking coal specification.

It is prepared to reduce its demand from the 75 per cent/25 per cent combination of foreign-to-home coals to the less efficient 55 per cent/45 per cent formula. But that is as far as it will go.

The principal weakness of the NCB case is that the British coalfields are short of the favoured "301" variety of coking coals, the low and medium volatile variety.

The board would like British Steel to take more of the highly volatile coals ("501" variety) that it can supply. British Steel argues that it would be penalising its investment if it uses high-sulphur content British coal with poor coking qualities.

British Steel buys about 8.5m tonnes of coking coal annually from the board and imports another 1.8m tonnes of special coking coals to obtain the combinations it needs. The new contracts with Australia would increase imports to between 2m and 3m tonnes a year.

Coking coal supplies for the Redcar furnace look like being a test case. If the board wins the right to supply the furnace from home coals, at the expense inevitably of British Steel iron output levels, it will then have every reason to press further to substitute home coals for the remaining 1.8m tonnes a year of coking coal imports.

LABOUR

End national pay talks, says engineers' chief

BY ALAN PIKE, LABOUR CORRESPONDENT

THE POSSIBILITY of abandoning national wage negotiations in the engineering industry is suggested today by Mr. John Boyd, general secretary of the Amalgamated Union of Engineering Workers.

Mr. Boyd, writing in his union journal, says that when the AUEW national committee meets later this month it must "surely give some thought" to bypassing the Engineering Employers Federation and conducting all negotiations on a factory on company basis.

National minimum rates are now negotiated with the EEF and local negotiations which determine actual earnings follow. The engineering unions are unhappy with a national offer made by the EEF last month—increases of up to £5 per week on basic rates in reply to a claim for up to £20.

Mr. Boyd says in his article that employers had shown by their offer that they had "no role to play in our modern, fast-changing society other than to try to keep wage rates at a really low level."

To suggest that a craftsman should have a basic rate of only £65 for a 40-hour week—the value of the employers' offer—"must force all of us to question the usefulness of any more national negotiations in the engineering industry."

Mr. Boyd launches a strong attack on the EEF, accusing the employers of being "oblivious to all that is happening around them, unresponsive to the challenge of change, blind to the wonderful new future which can be for engineering as we move further into the electronic and microprocessor age."

Both unions and employers in the engineering industry have until now valued the national agreement since it provides, in addition to minimum pay rates, common conditions throughout the industry. The unions now want manual workers' conditions of employment harmonised with those of white collar staff and the employers have offered a working party to consider this.

Briginshaw defends print union's financial moves

BY NICK GARNETT, LABOUR STAFF

LORD BRIGINSHAW, former general secretary of the National Society of Operative Printers, Graphical and Media Personnel (Natsopa) issued a statement yesterday defending financial policy decisions by the union during his leadership.

The union is seeking legal advice on whether to take civil proceedings to recover money that might be owed the union from property deals. Inquiries are also taking place into the operation of Swiss bank accounts and into companies set up through the union or by officers acting on their own authority.

Lord Briginshaw's statement says: "All actions taken by officers and staff were in accordance with the known and decided policies and instructions of the executive council and governing council and appropriate ballot votes of the membership."

Lord Briginshaw said that he resented the "continuing witch hunt" into the union's affairs.

"When I was elected general secretary of the society in 1951, the society was actually insolvent, as most trade unions are today.

"Natsopa in 1951 was in insipient bankruptcy as a result of inter-war generosities of the society with certain benefits to the membership. Policies and actions initiated with the executive councils of 1951 and subsequent years avoided the development of a bankruptcy situation during those years."

A special audit of the union's accounts has been carried out by Baker Sutton and Co., City accountants. Mr. Owen O'Brien, the present general secretary, said at the weekend that in future the union would present its balance sheets and financial statements in the way suggested in the accountants' report.

Re-election of Tierney boosts union moderates

THE MODERATE leadership of Britain's sixth largest union, the Union of Shop Distributive and Allied Workers, appears to have received a vote of confidence with the announcement yesterday of the re-election of Mr. Syd Tierney, MP, as national president.

He had an 80,000 majority over his Left-wing challenger Mrs. Audrey Wise, MP.

At the same time the Left-wing candidate for the general secretaryship, the election for which is still taking place, has lost his seat as a member of the national executive. He is Mr. John Dilks, who was convincingly beaten by his two successful moderate challengers.

In the presidential voting Mr. Tierney, MP for Birmingham Yardley, received 188,000 votes compared with Mrs. Wise's 108,000.

In the Midlands executive council election Mr. Ray Scherer of Nottingham, and Mr. Dick Stonehouse of Leicester were elected with 43,000 and 37,000 votes respectively. Mr. Dilks obtained 27,000 votes.

Although Mrs. Wise's defeat means that the union loses its chance of having a woman president for the first time, two additional women were elected to the executive—Mrs. Betty Wardle and Mrs. Loui Woolston—both from Manchester.

The election for general secretary has been caused by the imminent retirement of Lord Allen, who has led the union for 17 years. The contest is between Mr. Dilks and Mr. Bill Whatley who is the union's chief organising officer and standard bearer of the moderates.

FT Monthly Survey of Business Opinion

GENERAL OUTLOOK

Optimism falls further

OPTIMISM over the general *outlook for business continued* to decline in last month's survey, and this was mirrored by a further drop in confidence over the prospects for the UK economy.

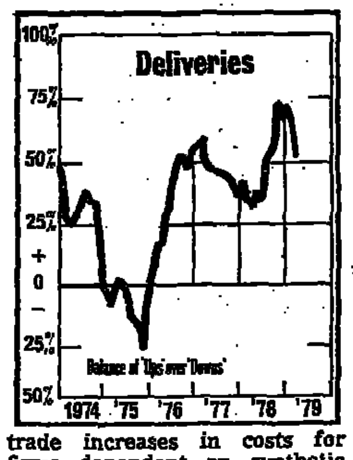
The March survey covered the *building and construction* sectors, as well as textile and clothing and the food and tobacco groups.

The decline in optimism over the *last four months* in the building sector was attributed mainly to industrial unrest and the bad weather. However, fears of recession, the world economic position and general uncertainty were cited as further factors.

In the textile and clothing trade increases in costs for firms dependent on synthetic fibres—where the rise in oil prices had an impact—was the main factor contributing to loss *of confidence.*

One of the main complaints over the prospects for the economy was that the very unequal level of wage settle*ments might* lead to further wage inflation, together with further industrial trouble before the end of the current wage round.

Export expectations also continued to fall. Companies in the *food* and *tobacco* and textile and clothing sectors were more inclined to see exports remain at the same level in the next 12 months, rather than higher as *they had four* months ago. Building and construction companies expected exports to decline.



GENERAL BUSINESS SITUATION

Are you more or less optimistic about your company's prospects than you were four months ago?	4 monthly moving total: Dec.-Mar. %	Nov.-Feb. %	Oct.-Jan. %	Sept.-Dec. %	March 1979: Construction %	Food & Tobacco %	Textiles & Clothing %
More optimistic	31	31	25	34	9	37	3
Neutral	35	43	55	51	32	37	36
Less optimistic	34	26	20	15	59	26	61

EXPORT PROSPECTS (Weighted by exports)

Over the next 12 months exports will be:	4 monthly moving total: Dec.-Mar. %	Nov.-Feb. %	Oct.-Jan. %	Sept.-Dec. %	March 1979: Construction %	Food & Tobacco %	Textiles & Clothing %
Higher	61	67	71	79	44	31	33
Same	30	22	21	16	14	69	50
Lower	9	10	6	3	38	—	17
Don't know	—	1	2	2	2	—	—

ORDERS AND OUTPUT

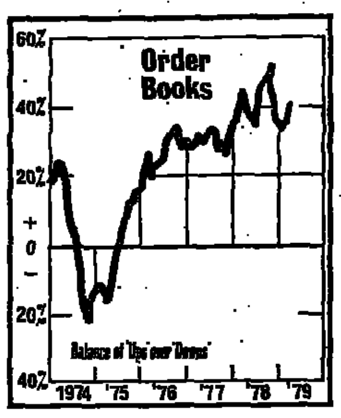
Drop in recent deliveries

WHILE recent deliveries have dropped in all three sectors, the picture on new orders and order books was not so gloomy. However, there was a slight fall *in the median expected* increase in turnover over the next 12 months—from an increase of 7.1 per cent to one of 7.0 per cent.

The main factor in the downturn in deliveries was the transport strike. However, the building sector had also been affected by the bad winter as well as cutbacks in public expenditure.

The weighted index for new orders showed no change—an *improvement among construction companies being offset* by a downturn in the textile and clothing sector. The survey warns, however, that in view of the pattern of the answers it is quite possible that the index may once again start to fall.

Companies in the food and tobacco sector were more inclined to expect order books to increase and as a result there was a small rise in the index. There has been a slightly *greater tendency for companies* to expect output or sales over the next 12 months to increase by less than 5 per cent. Nevertheless, this indicator remained *relatively buoyant.*



NEW ORDERS

The trend of new orders in the last 4 months was:	4 monthly moving total: Dec.-Mar. %	Nov.-Feb. %	Oct.-Jan. %	Sept.-Dec. %	March 1979: Construction %	Food & Tobacco %	Textiles & Clothing %
Up	50	49	54	[illegible]	35	56	39
Same	14	16	11	[illegible]	27	—	51
Down	15	14	12	[illegible]	14	26	8
No answer	21	21	23	[illegible]	24	18	2

PRODUCTION/SALES TURNOVER

Those expecting production/sales turnover in the next 12 months to:	4 monthly moving total: Dec.-Mar. %	Nov.-Feb. %	Oct.-Jan. %	Sept.-Dec. %	March 1979: Construction %	Food & Tobacco %	Textiles & Clothing %
Rise over 20%	6	3	4	[illegible]	—	17	—
Rise 15-19%	8	11	10	[illegible]	—	—	6
Rise 10-14%	19	15	10	[illegible]	5	21	15
Rise 5-9%	21	21	23	[illegible]	38	9	24
About the same	36	31	32	[illegible]	53	53	53
Fall 5-9%	1	1	—	[illegible]	—	—	—
No comment	9	18	21	[illegible]	4	—	2

CAPACITY AND STOCKS

Working below plan

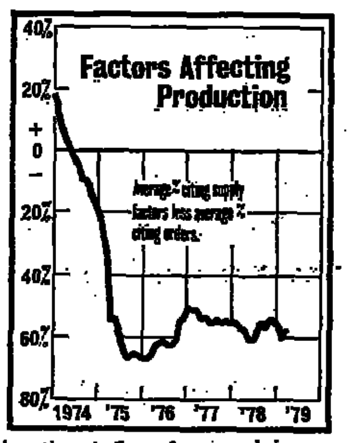
ALL THREE sectors were more inclined to say they were working at below capacity than they had been in November. This meant that the index measuring the extent to which companies were working at planned output levels or above—which had been rising—has now dropped back.

The sharp decline in the level *of expected bought-in supplies* in February has come to an end. Companies in the building and textile and clothing sectors were less inclined to expect stocks of all *types to* increase *over the* next 12 months, but food and tobacco companies were more inclined.

While there was a slight fall in the index for work-in-progress, the other indices, covering the overall level of stocks and *bought-in supplies,* increased.

There was little change in the index covering the level of stocks in relation to current sales trends. While the building and textile and clothing sectors were more inclined to say levels were too high than they had been last November, this was counterbalanced by findings in the food and tobacco sector.

There was little change in the pattern of answers covering factors affecting production, although companies were less inclined to mention labour disputes, following the end of the transport dispute.



CAPACITY WORKING

	4 monthly moving total: Dec.-Mar. %	Nov.-Feb. %	Oct.-Jan. %	Sept.-Dec. %	March 1979: Construction %	Food & Tobacco %	Textiles & Clothing %
Above target capacity							
Planned output							
Below target capacity							
No answer							

STOCKS

Raw materials and components over the next 12 months will:	4 monthly moving total: Dec.-Mar. %	Nov.-Feb. %	Oct.-Jan. %	Sept.-Dec. %	March 1979: Construction %	Food & Tobacco %	Textiles & Clothing %
Increase	42	36	34	37	27	56	18
Stay about the same	42	45	49	46	49	44	53
Decrease	8	7	3	4	—	—	29
No comments	8	12	14	13	24	—	—
Manufactured goods over the next 12 months will:							
Increase	32	25	25	31	7	74	18
Stay about the same	39	47	43	40	59	17	36
Decrease	8	7	5	6	19	—	44
No comments	21	21	27	23	15	9	2

FACTORS CURRENTLY AFFECTING PRODUCTION

	4 monthly moving total: Dec.-Mar. %	Nov.-Feb. %	Oct.-Jan. %	Sept.-Dec. %	March 1979: Construction %	Food & Tobacco %	Textiles & Clothing %
Home orders	81	79	79	83	92	98	90
Export orders	60	67	63	67	49	28	65
Executive staff	16	19	19	13	—	—	24
Skilled factory staff	27	27	42	45	—	26	39
Manual Labour	10	12	12	7	9	—	15
Components	3	4	4	6	—	—	15
Raw materials	12	14	9	12	11	18	—
Production capacity (plant)	11	4	4	4	8	37	—
Finance	1	1	1	1	—	—	—
Others	10	7	9	5	4	18	2
Labour disputes	18	26	26	25	4	—	63
No answer/no factor	3	5	3	1	4	—	8

INVESTMENT AND LABOUR

Better job prospects

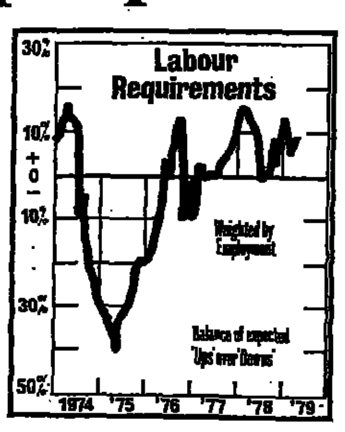
THERE WAS a slight increase in the index for labour requirements. However, the survey warns that much of the increase derived from the weighting pattern of answers and should therefore be treated with caution.

Companies in the building and textile and clothing sectors were *more inclined to mention* employment legislation, plans to increase productivity and uncertainty about the future as factors discouraging them from increasing employment levels.

Both the building and food and tobacco sectors were more *inclined to say that their capital* expenditure would increase over the next 12 months in volume terms. As a result this index, which had been falling, has *started to rise.*

Weighted by capital expenditure, the balance of companies expecting an increase in investment over the next year over *those expecting a decline rose* from 38 per cent to 42 per cent.

At the same time all three sectors were more inclined to say they would require outside finance for capital expenditure in the next year than they had been in November.



LABOUR REQUIREMENTS (Weighted by employment)

Those expecting their labour force over the next 12 months to:	4 monthly moving total: Dec.-Mar. %	Nov.-Feb. %	Oct.-Jan. %	Sep.-Dec. %	March 1979: Construction %	Food & Tobacco %	Textiles & Clothing %
Increase	26	27	30	32	11	24	8
Stay about the same	57	51	53	43	66	54	74
Decrease	17	22	17	25	23	22	18

CAPITAL INVESTMENT (Weighted by expenditure)

Those expecting capital expenditure over the next 12 months to:	4 monthly moving total: Dec.-Mar. %	Nov.-Feb. %	Oct.-Jan. %	Sept.-Dec. %	March 1979: Construction %	Food & Tobacco %	Textiles & Clothing %
Increase in volume	53	46	47	46	56	64	39
Increase in value but not in volume	6	8	8	10	—	—	30
Stay about the same	23	23	23	18	28	36	15
Decrease	16	16	14	16	16	—	16
No comment	2	7	8	10	—	—	—

COST AND PROFIT MARGINS

Wages move up

COMPANIES' expectations of wage costs continued to move slowly upward, although the reverse pattern seems to be evident for total unit costs.

The *median expected increase* for wages over the next year moved up from 12.2 to 12.5 per cent between February and March, while the comparable figure for unit costs fell from 11.1 to 10.4 per cent.

The pattern for expected price changes was similar to that for unit prices, with higher *than previously expected rises* among construction and textile companies more than balanced by forecasts in the tobacco and food sector.

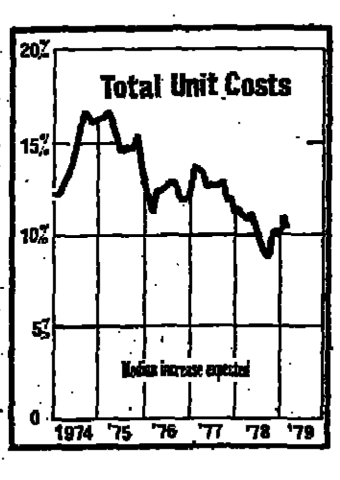
There was a further drop in the index covering profit margins, with the building and food and tobacco sectors both more likely to say they expected mar*gins* to contract. Among the factors cited as tending to reduce margins were price competition at home and abroad and wage and cost increases, *including those of oil.*

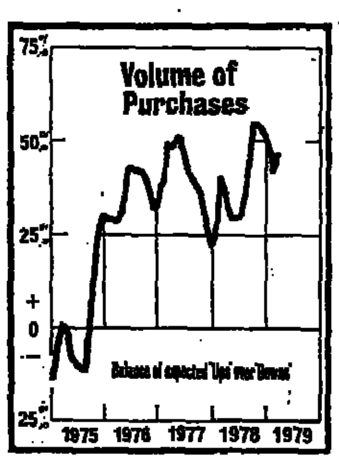
These surveys, which are caried out for the Financial Times by the Taylor Nelson Group, are based upon extensive interviews with top executives.

Three sectors and some 30 companies are covered in t[illegible] every month. They are drawn from a sample based upon the FT-Actuaries' Index, which accounts for about 60 per cent of all public companies.

The all-industry figures are four-monthly moving totals covering some 120 companies in 11 industrial sectors (mechanical engineering is surveyed every second month).

Complete tables can be purchased from Taylor Nelson and Associates.





COSTS

Wages rise by:	4 monthly moving total: Dec.-Mar. %	Nov.-Feb. %	Oct.-Jan. %	Sept.-Dec. %	March 1979: Construction %	Food & Tobacco %	Textiles %
5-9%	14	19	24	24	—	18	3
10-14%	61	55	51	56	[illegible]	63	83
15-19%	14	11	8	6	[illegible]	17	12
20-24%	1	1	1	—	[illegible]	—	—
No answer	10	14	16	14	2	2	2
Unit cost rise by:							
0-4%	1	1	1	1	—	—	—
5-9%	26	26	35	34	—	46	6
10-14%	46	45	43	43	92	37	75
15-19%	10	11	3	1	—	—	12
20-24%	—	—	—	—	2	—	3
25-29%	—	—	—	—	—	—	2
Same	3	3	—	—	—	—	—
Decrease	4	—	—	2	—	17	—
No answer	10	14	18	19	6	—	2

PROFIT MARGINS

Those expecting profit margins over the next 12 months to:	4 monthly moving total: Dec.-Mar. %	Nov.-Feb. %	Oct.-Jan. %	Sept.-Dec. %	March 1979: Construction %	Food & Tobacco %	Textiles & Clothing %
Improve	43	40	39	33	49	35	54
Remain the same	35	47	41	40	12	19	16
Contract	20	12	13	21	35	46	15
No comment	2	1	7	6	4	—	15

Building and Civil Engineering

Over £10m worth for Crown House

FORMED TO handle overseas interests for the Group, Crown House Engineering International has won contracts in the Middle East valued at £10.23m.

Four contracts in Egypt have been awarded by the Arab Organisation for Industry. With main contractor, John Laing International, in a £4.5m contract, the company will supply and instal the air-conditioning and electrical work, plumbing, fire protection, compressed air services and cranage, for a factory project at Helwan, Cairo. Parsons Brown is the consulting engineer for the work which starts in May with completion due in a year's time.

Also at Helwan, with Cementation International as main contractor, plumbing, electrical and air-conditioning services will be installed at an office complex. Work on this project (valued at £780,000) starts next month with completion in April next year.

A £3m contract at a factory project at Heliopolis, Cairo, also involves the supply and installation of air-conditioning, plumbing, fire protection and compressed air services. Cementation International is main contractor. Vincent Gorbing and Partners the architect, with consulting engineer Watkins Hart and Payne. Work started in February and completion is scheduled for September.

Hassan Mohammed Allam Sons of Cairo is main contractor on another factory project at Heliopolis. Vincent Gorbing and Partners is the architect and Watkins Hart and Payne the consulting engineer on the contract for electrical, air conditioning and plumbing services. Work on the £1 contract started in January.

In Saudi Arabia, Crown House Engineering International will work for the Saudi Arabian Monetary Agency on its Bank's headquarters at Dammam. This £1.7m contract for supplying and installing air-conditioning, electrical, plumbing and fire protection services, includes the installation of a data log system, and conduit tubing, etc., for the security system.

Main contractor at Dammam is Cementation Saudi Arabia. Brown Daltas Associates is the architect, with Orsi and Koerner the consulting engineer and Hardy Hobbs and Associates the chartered quantity surveyor—they are all from Rome. Work starts very soon and completion should be in January 1981.

Work at power station

WEST COUNTRY subsidiary of the Mowlem Group, E. Thomas and Co., has won a £2m CEGB contract for civil engineering work at Hinkley Point A power station, Bridgwater, Somerset.

Work involves the construction of two three-storey steel framed buildings each containing a heavy reinforced vault for the storage of magnox fuel after its removal from the reactor.

Each vault will be about 31.8 foot square, 39.4 foot high, and partly underground. Both buildings will be about 52.5 foot high.

Other work includes installing complex mechanical and electrical services and plant.

Work is due to start shortly and should be completed in the autumn of 1980.

Kent hotel extension

EXTENSION OF the Great Danes Hotel at Hollingbourne, Kent, is to be undertaken for Rank Hotels by Sir Robert McAlpine and Sons. Value of the contract is nearly £1m.

Main task will be to add another 51 bedrooms in a three-storey block. Work is about to start and is due for completion in early 1980. Architects are Peter Ednie and Partners and quantity surveyors, the Watkins Pool Partnership.

Awards to C. Bryant

A CONTRACT to modernise 250 houses in Acocks Green, Birmingham, has been awarded by the City of Birmingham Housing Authority to C. Bryant and Son.

Bryant is also to erect a multi-storey car park for Redditch Development Corporation as part of a town centre scheme. This is worth £1.5m.

Another award, from Delta Tubes, covers reconstruction of two factories—one at the company's island site in Heath Street South, Birmingham (£462,000), the other in Eyre Street, Birmingham (£233,000). Architects are Harper, Fairley Partnership and quantity surveyors Frances C. Graves & Partners.

Other contracts are a warehouse and office block in Sheldon, Birmingham, for the Church of Jesus Christ of Latter Day Saints (£235,000)—architect and quantity surveyor Alan Douglas, and an office block in Codsall, Wolverhampton, for F. Maiden Selwyn and Co. (£125,000)—architect Robert D. Gibbs, quantity surveyor A. Reynolds.

Industrial buildings

LAUNCHED BY the Atcost Group of Tunbridge Wells is a new industrial building design system called Atcost 80, said to be particularly suitable for warehouse and factory projects, offering total versatility in design possibilities.

Major feature is the variable gutter location which, when positioned in the elevation, will act as a brick restraint, a lintel over windows or doors, and will also serve as an inherent structural member.

A curved eave course has been introduced at the additional gutter level. This plus the wide range of colour claddings available, says the company, enables the achievement of a high degree of user acceptance.

The columns are said to provide from a minimum one hour to four hours fire resistance.

Dredging in Abu Dhabi

ONE OF Holland's largest building contractors, HBG, has announced the award of a contract to its dredging division, HAM, for dredging and reclamation works for the Abu Dhabi government.

This consists of deepening channels and a harbour basin together with reclamation works for four industrial areas. About 15m cubic metres of sad and rock have to be removd, and two large cutter suction dredgers will be mobilied.

Project is due to stat soon and will take about 11 months to complete.

Variety of jobs for A. Monk

THREE FACTORY blocks for Warrington Development Corporation are to be built by A. Monk & Company under a £1.36m contract.

The three blocks, together totalling about 10,200 square metres in area, will vary in height between 5.4 and 6.9 metres to the eaves and have integral office accommodation in single and two-storey form to allow for future expansion.

Construction will be generally steel frame on reinforced concrete foundations, with low-level brick-block cavity walling and external coloured metal cladding above. Architects are John Mather & Partners.

In Yorkshire Monk has secured two contracts, one for new houses, and the other for modernisation of older property, both awarded by the City of Bradford Metropolitan Council. Total value of these awards is £1.3m.

Monk has also won two other contracts. One is from British Rail Engineering for building an extension to the apprentice training school at Wolverton, Bucks. (£104,552) and the other from Skelmersdale Development Corporation for the construction of an extension to a factory (£515,669).

Wiltshiers active in Kent

THE CANTERBURY Building Division of Wiltshiers has been awarded contracts worth nearly £500,000.

Work has started on a £257,000 extension and renovation of Ledge Point at Westgate on Sea, Kent, for the Post Office Fellowship of Remembrance. Young and Purves are the architects for this project which calls for the provision of new bar facilities, a general amenity area, decoration of the rooms and the installation of a new heating system.

In Queenborough, Kent, Wiltshiers is erecting a chemical production unit for Abbott Laboratories while in High Street, Canterbury, work has begun on a £74,000 refurbishing job for the Sussex County Building Society.

Industrial awards

THREE industrial building contracts, together worth about £1.14m have been won by Tilbury.

The largest, for the Welsh Development Agency, involves the £650,000 conversion of a large factory at Penallta, Mid-Glamorgan, into 7 small units and the construction of four new units, together with associated roads, sewers and accommodation works.

In the same county, the council has instructed Tilbury to proceed with an extension to Ysgol Cefn Glas School, Bridgend, at a cost approaching £100,000. The third contract is worth about £390,000 and is for a warehouse and vehicle maintenance unit at Carno, Powys, for Laura Ashley.

Omnia units for Riyadh

AL MORABA Intersystems of Al Khobar has signed a contract with the Riyadh office of Keang Nam Enterprises of Seoul, Korea, for the supply of 190,000 square metres of Omnia wide slab units and precast parapets for a development of 800 single storey dwellings in Riyadh.

Al Moraba, licensed Omnia manufacturers in the eastern region of Saudi Arabia, will be making the units in a specially constructed on-site plant.

Value of the contract to Al Moraba is about £1.5m, excluding materials and unskilled labour which will be supplied by the contractors.

Cartwright group busy

LARGEST JOB in a number of contracts totalling £5.4m awarded to companies in the Joseph Cartwright Group is for Kirklees Metropolitan Council, and is valued at £2.3m. This involves the building of six blocks of two-storey flats, giving a total of 182 dwellings close to the railway station in central Dewsbury. Another local authority job, valued at £425,000 is for 38 new dwellings at Gledhill, Dewsbury.

Improvements to 121 houses at Elland for the Calderdale Council are valued at £600,000, and 26 homes for the Bradford Metropolitan District Council are valued at £150,000.

In the south, the company is to commence a project at Llandough, Cardiff, which will provide 64 new dwellings for the Wales and West Housing Association, estimated to cost £780,000. In Bath, work on a refurbishment scheme in the city centre will provide 32 flats in the restored Fountain Buildings under a contract of £340,000 for the Knightstone Housing Association.

The group's civil engineering company has acquired contracts totalling £800,000, including reconstruction of the Brackla Road Bridge for the Mid Glamorgan County Council, flood prevention work at Siston, Avon, for Wessex Water Authority, and construction of a bridge at Port Pentre Bach, Crickhowell, near Abergavenny.

Oil terminal in Ecuador

THE ECUADOR State Petroleum Corporation (Corporation Estatal Petrolera Ecuatoriana) has commissioned Sir William Halcrow & Partners to design and supervise construction of the second stage of an offshore tanker terminal required for the export of petroleum products from its recently constructed refinery at Esmeraldas. Mechanical and electrical engineering services will be provided by Ewbank & Partners.

The first stage development, which provided a temporary facility for the refinery and became operational in November 1977, and for which Halcrow was also responsible, comprised a four-hose sea-bed manifold located four kilometres offshore, in a water depth of 16 metres. The temporary terminal was built to accommodate tankers up to 20,000 dwt and needed to be connected to the Esmeraldas refinery, situated some distance inland.

A recently signed contract for provision of a permanent and larger tanker facility, says Halcrow, involves replacing the sea-bed manifold by creation of a two-berth sea island terminal capable of accommodating vessels up to 50,000 dwt. Construction is foreseen of a central loading platform serving two alongside berths; in addition, the terminal will include separate berthing and mooring dolphins, and an auxiliary services and accommodation platform. Main structures will be of steel piled jacket design and will be interconnected by steel access bridges.

IN BRIEF

● Contracts worth £964,000 awarded to D. Wilson (Birmingham) include work for the Licensed Victuallers National Homes, Churchwell Housing Society, Church Army Association and Bromford Housing Society.

● Pipeline insulation sub-contract worth £1m has been placed with McGill Insulation Group, Hadleigh, Essex, by Land and Marine Engineering on behalf of Pembroke Cracking Company, for work on a 12-inch diameter, five miles long land and submarine oil pipeline at Milford Haven.

● Smith and Partners announces two major contracts with Tempco International: comprehensive conversion of an existing dry-storage warehouse into a cold-storage chamber at Dronfield, six miles from Sheffield and construction of a cold store in Wisbech Road, Kings Lynn.

● New president of the Concrete Block Association is Basil M. Rayner, managing director of Beachcroft Concrete Partitions (Phoenix Timber Group). In its annual report the Association says that the block industry met a rising demand in 1978: total deliveries were over 72m square metres, about 11 per cent more than in the previous year.

● Ercon (Engineering and Resources Consultants) has been awarded a contract to design and supervise the construction of an animal feed processing complex at Ruwi, near Muscat, Oman, by Oman Flour Mills.

● A fitting-out contract worth about £2m has been awarded to Bovis Construction by Owen Owen. The work is to be carried out at the latter's new store due to be opened in 1980 in Redditch, Worcs. Architects are Stewart K. Riddick & Partners.

Hospital in Spain

SPANISH MEMBER company of the John Laing Group, Laing SA, has been awarded a £6.2m contract to modernise the Gran Hospital, Madrid, for the Spanish Instituto Nacional de Prevision.

Project is due to start in June and involves gutting areas of the 14-storey hospital (built in the late 1940s) and rebuilding them. Apart from cleaning the external facing brick and stonework facade and structure will remain unaltered. During the period of the 30-month contract the hospital will continue to function.

Work also includes converting four-bed wards into two-bed rooms, replacing existing lifts with 15 new ones, including two in newly constructed lift shafts, the transfer of 12 operating theatres into other areas of the building and the construction of an additional cobalt therapy room. Contract also covers complete redecoration, rewiring, replumbing, and the replacement of heating and ventilation systems.

Dividing the hospital vertically, work will be carried out in three overlapping phases. Temporary brick partitions will be built in passages to isolate the construction areas from the rest of the hospital, eliminating problems of dust and noise.

Factory contract

NEW FACTORY on a nine-acre site at Peterborough will be built by Wimpey Construction for Sodastream, the company which makes do-it-yourself machines for fizzy soft drinks.

Contract is worth £2.3m and was announced by the Development Corporation which is handling the city's expansion scheme.

The brick and steel factory will cover 144,800 square feet and will be ready for completion in the summer of next year.

Technical News

EDITED BY ARTHUR BENNETT AND TED SCHOETERS

● ANALYSIS

Identifies the oil

A DATA analytical technique that could have numerous applications within the oil industry has been developed by a Norwegian scientist reports Fay Gjester from Oslo. The method could be used to identify the contributors to a composite oil slick, and to establish the proportions of different oils present in the slick.

Similarly, it could be used to determine accurately the proportions of oils delivered from different operators simultaneously to a common pipeline (provided that the chemical composition of the oils was different).

In each case the analyst would need a data bank of information on the oil types likely to be present.

Dr. Olaf H. J. Christie, head of Oslo University's Mass Spectrometry Institute, has developed the technique during independent research done in his spare time without the backing of either industry or government. It is based on extensions of existing analytical methods, particularly one devised by Dr. F. Wold of Umea University in Sweden, a world expert on chemical classification.

Dr. Christie's method relies on the fact that oils from different sources have their own chemical "fingerprint." Each oil contains different amounts of various elements and organic compounds. Its composition can be translated into computer language and stored in a data bank. Then, by comparing the composition of a slick or a composite oil delivery with the information in the bank the required answers can be found.

Although the theory behind the method is far above the layman's head, it produces evidence in the form of patterns on a computer printout which laymen could recognise and accept.

Clusters of numbers in the print-out (each number representing a type of oil) show clearly which types are present in a composite slick and in what proportions.

This visible demonstration of the scientist's conclusion would be of value in a court case where a jury had to decide the liability of different contributors to a slick.

● COMMUNICATIONS

Coping with satellite data

INVOLVEMENT in weather and satellite communication technology by S.E. Laboratories (EMI) has increased since the Post Office Research Centre at Martlesham started using a portable SE8-4 analogue instrumentation magnetic tape recorder.

The centre is investigating the effects of the weather on radio wave propagation. Its experiments, which began on a full time basis in January, form part of Europe-wide programme of feasibility studies into the characteristics of satellite communication networks under varying environmental conditions.

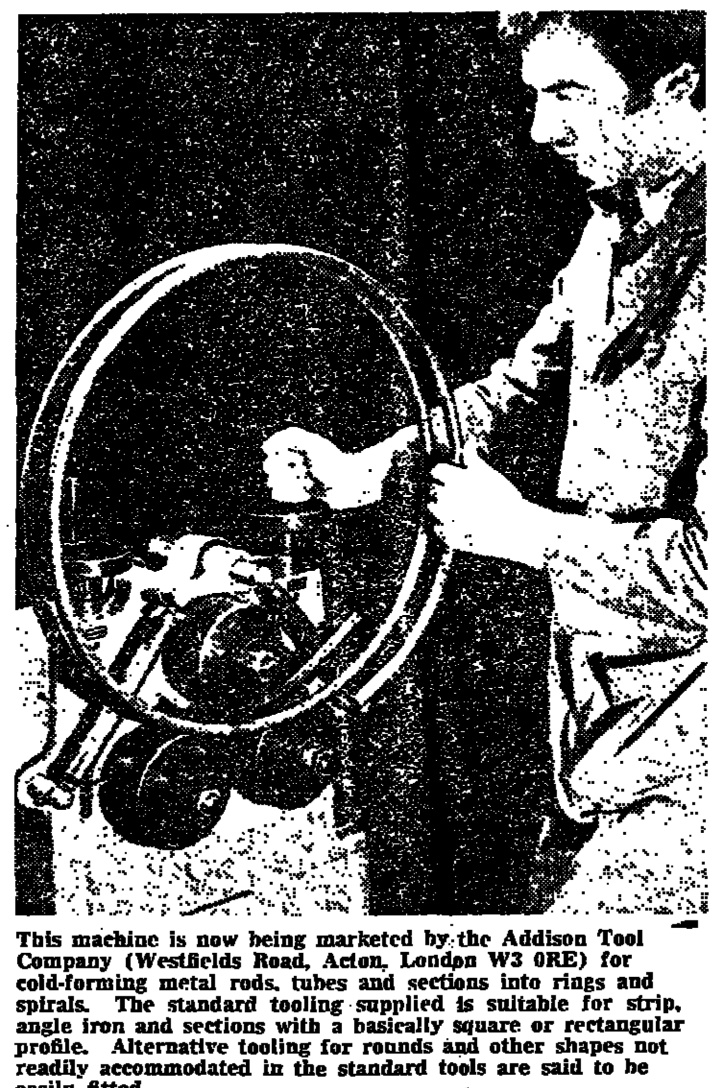
Object of the experiments is to provide European PTT organisations with the necessary information systems for the 1980's. Such systems will be used for voice, radio, television and computer data communication.

Extremely high frequency signals are being sent up to a European geostationary satellite (OTS 2), from which they are bounced back to a dish aerial at Martlesham and recorded. Signal deterioration due to adverse weather conditions such as heavy rain, snow, thunder, hailstorms, etc. can be significant, and it is one of the main areas of interest, to see whether the effects of this can be reduced.

Rapid, sudden fluctuations in the signals (called scintillations) are recorded by the SE Labs 8-4 machine, which is British designed and manufactured. It provides a continuous record of these scintillations for subsequent computer analysis, and plays an important role in the overall experimental programme.

A more powerful unit (SE 7000) is being used by the University of Dundee to help produce weather pictures (photofacsimile images of the British Isles. These images are generated from data received from the NOAA5 weather satellite and are recorded continuously by the SE7000.

SE Labs (EMI), Recording Division. 01-890 1477.



This machine is now being marketed by the Addison Tool Company (Westfields Road, Acton, London W3 0RE) for cold-forming metal rods, tubes and sections into rings and spirals. The standard tooling supplied is suitable for strip, angle iron and sections with a basically square or rectangular profile. Alternative tooling for rounds and other shapes not readily accommodated in the standard tools are said to be easily fitted.

● SAFETY AND SECURITY

Quick end to fires

FOR USE in conjunction with its Helios range of fire alarm equipment, Bowcom Electronics (83 High Street, Esher, Surrey KT10 9QA, 0372 66348) has introduced extinguishing systems that can be suited to the precise needs of the customer.

Employing carbon dioxide or halon gas extinguishants, the systems are intended primarily for the protection of high value installations such as computer centres, or unattended electrical or electronic equipment which could present a serious fire hazard if a fault condition developed.

A bank of gas cylinders, with a fixed pipe distribution network, has a release control which is connected to a multi-zone fire alarm control panel, in turn monitoring smoke or heat detectors.

However, to avoid gas discharge by a false alarm, two separate detectors have to be triggered and the area to be protected is monitored by two-zone circuits for this purpose.

Two stage alarm is also employed: after the second audible alarm has sounded a delay timer allows between 10 and 60 seconds for personnel to clear the area before gas is released.

Gas alarm system

A COMPREHENSIVE collection of equipments for the detection of phosgene, hydrogen cyanide, nitrogen dioxide and hydrogen sulphide on a personal basis has been introduced by MDA Scientific (UK), Ferndown Industrial Estate, 86, Cobham Road, Wimborne, Dorset BH21 7PQ (0202 872106).

Known as the Monitox personal gas alarm system, the individual detectors measure only 104 x 62 x 29 mm and weigh only 150 grams; each uses an electrochemical cell specific to the gas in question. An audible alarm sounds if the gas concentration exceeds a pre-set level, with an earphone for use in noisy areas.

A small battery-operated gas generator provides a simple and fast functional check of the detectors (five at a time) before they are issued to personnel. The "plug-in" arrangement avoids the problems normally arising when handling toxic gases.

Scope can be extended by the use of an additional dosemeter to compute the time weighted average over working periods up to 12 hours. Microprocessor controlled, it stores and subsequently prints out a concentration/time profile.

Sees smoke early on

MAINS operated, the 7292-03 smoke switch from Chloride Gent will give an early response to both smouldering and flaming fires and incorporates verification circuits to minimise false alarms.

Basic arrangement is a light emitting diode light source (with a 30-year rated life) and a pair of photocells, one of which receives light only when it is scattered by smoke while the other monitors the LED output to compensate for possible variations that may occur, due perhaps to mains changes. Once the unit has stabilised, the typical standby current consumption is 35 mA (at 75 degrees C).

The smoke switch is factory calibrated to produce an alarm when smoke in the chamber reaches 1.5 per cent obscuration per foot. It latches into an alarm condition, which is then shown by an indicator on the housing. Re-setting is by momentary interruption of the mains input.

Testing is possible without smoke. By applying a magnet at an indicated place a reed switch can be operated which lights a test LED in the enclosure, in turn illuminating the detection photocell.

The device measures 6 ins by 2¾ ins deep.

More from Temple Road, Leicester LE5 4JF (0533 730251).

● INSTRUMENTS

Thickness measurement

NEW CONCEPTS in thickness measurement eliminate the risk of errors through incorrect instrument calibration and are incorporated in a pocket-sized digital ultrasonic thickness gauge named Audit-80.

Access to only one side of the test piece is necessary, which represents a big advantage over standard micrometers and calipers.

Audit-80 is intended to meet increasing needs throughout manufacturing industries for routine inspection at all stages of the production process, especially machining, assembly, test and installation or commissioning. These requirements arise from both current and anticipated legislation governing product liability and safety.

The instrument is expected to play an important role in materials inspection by steel stockholders and other metals suppliers and at the goods inward stage where significant savings can be made through the rejection of unsuitable material before money is wasted in using it in manufacturing processes.

Circuit precalibration and encapsulation during manufacture ensures correct calibration for use on steel in the standard instrument throughout the life of the instrument during normal use. There are no controls for the operator. Even the on/off switch has been incorporated in the probe so that it operates automatically when the probe is placed on the test surface. In this way operation is simplified to the utmost so that the instrument can be operated with only one hand and battery life between charges is prolonged.

Baugh and Weedon, Widemarsh Street, Hereford (0432) 67671.

Temperature indicator

DIGITAL temperature indicator to provide high accuracy temperature measurement under any ambient conditions has been introduced by Aughton Instruments, Kirkby.

Called the ATI-100 it is available in four types to suit many industrial and laboratory applications. Temperature display is either 3½ digit 0.3 in LED or 0.4 in LCD depending on the type.

The indicator has four-wire platinum resistance or nickel resistance sensors through which a constant current of less than 1mA is maintained. Accuracy is ±0.1C within the range −100 to +200C (platinum) and ±0.1C within the range −70 to +170C (nickel). The instrument is factory-set to comply with the sensor curve to within a maximum error of 0.05C over the whole calibrated range.

Calibration to National Standards can be effected by substituting the probe for fixed values of four-wire standards, for example, 0C=100 ohms, 100C =138.5 ohms, which also have calibration certificates.

Aughton Instruments, Woodward Road, Kirkby Industrial Estate, Kirkby, Liverpool L33 7UZ. 051 548 6060.

Will detect the flaws

MULTI-FREQUENCY eddy-current test instruments of high resolution stability and sensitivity are being introduced by Wells-Krautkramer under the description Defectomat F 2.825.

Designed for flaw detection and materials sorting, conductivity measurement, coating thickness and clearance measurement, manual or semi-automatic component testing and precise determination of eddy-current test parameters, the device incorporates two adjustable monitors. Standard specification includes chart and tape recorder outputs and a connection for data processing instrumentation.

Test evaluation is by digital volmeter readout of x, y and z components and an oscilloscope display incorporating an optional storage facility. Test frequencies are continuously variable from 100 Hz to 1MHz. Testing speeds are within the range 0.2 mm/s up to 100 m/s, dependent upon frequency setting and type of probe or sensor utilised.

F 2.825 has facilities for matching to all eddy current differential or absolute probe systems: it will operate with standard or special transit coils, fixed or rotating probes, scanning probes, etc. of any manufacture.

Standard 19-inch modular racking enables servicing to be quickly implemented. Front and control panels open upwards or downwards and lock in position as required.

Operational temperature range is 0-35 degrees C although units for use at higher temperatures can be supplied to order. It weighs 41 kg and physical dimensions are 510 mm wide x 310 mm high x 570 mm deep.

Wells-Krautkramer, Castle Vale Industrial Estate, Maybrook Road, Minworth, Sutton Coldfield, West Midlands B76 8AY (021-351 3151).

● BANKING

Counts the notes at high speed

SPECIALISING IN the design, development and manufacturing of bank-note processing systems, the Swedish Company Inter Innovation has received orders from Barclays Bank, Chubb Integrated Systems and Datasaab for over 800 cash adapters and dispensers.

The adapter takes over the tedious and time-consuming part of counting and delivering money and does it much better. It can handle the same number of denominations as a teller and it is able to work with new, used and poor quality notes in any mixture. It does the job fast and reliably, allowing the teller time to give better service to the customer, and it increases bank floor security.

The system delivers to the teller the exact amount of notes required, in one bundle, ready to be handed straight to the customer. With microprocessor control the adapter is so fast that it can easily be operated by two tellers simultaneously, dispensing around 15 notes per second.

Orders from Datasaab include over 250 units representing an initial shipment of equipment to support Citibank of New York, N.Y., teller-terminal system which is being installed in New York City this year.

The heart of the cash adapter is a modular mechanism (the MDDM), providing a choice of note capacity and number of denominations to the user. Money is stored in tamper-proof cassettes designed specifically to be simple to handle and transport.

Chubb, the UK banking-equipment supplier, has made a successful design around the MDDM of customer-operated note dispensers and automatic teller machines (ATM). Its order for 500 units includes equipment for the Swedish nationwide ATM network operated by a consortium of commercial banks, with Philips Data Systems as prime contractor.

Inter Innovation, Box 43009, S-100 72 Stockholm/Sweden.

MOTOR CARS

Quarterly analysis of bank advances

to UK residents by banks in the UK at February 21, 1979; as Table 4 in the Bank of England Quarterly Bulletin.

£m

		ADVANCES TO UK RESIDENTS: Total	of which in sterling	of which in foreign currencies	FINANCIAL: Total financial	of which in sterling	Hire-purchase finance houses	Property companies	Other financial
London clearing banks	1978 Nov. 15	18,625	17,039	1,587	2,069	1,615	149	788	1,132
	1979 Feb. 21	19,807	18,236	1,571	2,026	1,601	157	792	1,077
Scottish clearing banks	1978 Nov. 15	2,529	2,215	314	268	134	38	62	168
	1979 Feb. 21	2,589	2,287	302	267	160	37	75	156
Northern Ireland banks	1978 Nov. 15	622	619	2	22	20	3	13	5
	1979 Feb. 21	661	659	2	22	20	3	13	6
All banks	1978 Nov. 15	45,445	34,052	11,393	8,216	5,220	1,134	2,233	4,839
	1979 Feb. 21	47,508	36,225	11,284	8,350	5,382	1,262	2,227	4,861
of which in sterling	1978 Nov. 15	34,052			5,220		1,129	1,838	2,253
	1979 Feb. 21	36,225			5,382		1,240	1,848	2,295
Changes: in sterling	1978 Aug./Nov.	+1,020			+114		+18	−58	+154
	Nov.78/Feb.79	+2,173			+162		+111	+10	+42
in foreign currencies adjusted for exchange rate effects§	1978 Aug./Nov.	+266			+28		−26	−17	+72
	Nov.78/Feb.79	+100			+37		−1	+1	+27

		MANUFACTURING: Total manufacturing	of which in sterling	Food, drink and tobacco	Chemicals and allied industries	Metal manufacture	Electrical engineering	Other engineering and metal goods	Shipbuilding*	Vehicles	Textiles, leather and clothing	Other manufacturing
London clearing banks	1978 Nov. 15	4,890	4,578	729	534	302	408	1,089	402	208	432	805
	1979 Feb. 21	5,404	5,094	736	554	322	444	1,243	404	239	519	934
Scottish clearing banks	1978 Nov. 15	597	566	113	52	24	29	101	137	9	56	76
	1979 Feb. 21	606	576	106	52	23	32	100	140	17	56	78
Northern Ireland banks‡	1978 Nov. 15	111	110	26	—	—	—	39	—	—	20	25
	1979 Feb. 21	114	113	24	—	—	—	39	—	—	23	28
All banks	1978 Nov. 15	11,808	9,597	1,983	2,286	695	896	2,062	638	578	849	1,819
	1979 Feb. 21	12,721	10,442	2,098	2,359	762	993	2,275	624	616	917	2,074
of which in sterling	1978 Nov. 15	9,597		1,622	1,505	617	753	1,789	565	546	718	1,481
	1979 Feb. 21	10,442		1,718	1,582	670	848	2,003	568	589	795	1,684
Changes: in sterling	1978 Aug./Nov.	+111		+2	+191	+37	+7	+20	+16	−62	−89	−7
	Nov.78/Feb.79	+845		+96	+57	+53	+95	+219	+3	+43	+77	+203
in foreign currencies adjusted for exchange rate effects§	1978 Aug./Nov.	+63		−31	+11	−1	+9	+66	+19	−29	+11	+9
	Nov.78/Feb.79	+94		+24	+17	+16	+6	—	−17	−2	−9	+59
Advances only Amounts outstanding All banks	1978 Feb. 15	9,825	7,781	1,645	1,781	521	717	1,675	541	673	786	1,481
	May 17	10,098	7,833	1,770	1,845	513	742	1,725	575	531	842	1,556
	Aug. 16	10,555	8,421	1,781	1,932	548	732	1,823	604	547	859	1,669
	Nov. 15	10,649	8,458	1,768	2,104	552	811	1,911	621	448	777	1,657
	1979 Feb. 21	11,436	9,174	1,840	2,160	593	889	2,114	620	470	852	1,897

		OTHER PRODUCTION: Total other production	of which in sterling	Agriculture, forestry and fishing	Mining and quarrying	Construction	PERSONS: Total persons	of which in sterling	For house purchase	Other
London clearing banks	1978 Nov. 15	2,573	2,534	1,401	153	1,023	3,915	3,912	1,234	2,681
	1979 Feb. 21	2,648	2,604	1,394	156	1,098	4,078	4,074	1,270	2,808
Scottish clearing banks	1978 Nov. 15	515	455	347	72	96	417	417	118	300
	1979 Feb. 21	540	481	378	63	100	415	415	114	301
Northern Ireland banks	1978 Nov. 15	159	159	111	4	43	138	138	33	105
	1979 Feb. 21	173	173	121	4	47	147	147	33	115
All banks	1978 Nov. 15	5,122	4,180	1,952	1,453	1,717	5,848	5,838	1,715	4,133
	1979 Feb. 21	5,294	4,310	1,991	1,429	1,783	6,028	6,018	1,762	4,266
of which in sterling	1978 Nov. 15	4,180		1,945	628	1,606	5,838		1,714	4,124
	1979 Feb. 21	4,310		1,982	651	1,678	6,018		1,761	4,257
Changes: in sterling	1978 Aug./Nov.	+163		+113	—	+48	+267		+71	+196
	Nov.78/Feb.79	+130		+37	+23	+72	+180		+47	+133
in foreign currencies adjusted for exchange rate effects§	1978 Aug./Nov.	−12		—	−23	+11	−2		—	−2
	Nov.78/Feb.79	−33		+3	−32	−4	—		—	−2

		SERVICES: Total services	of which in sterling	Transport and communication	Public utilities and national government	Local government	Retail distribution	Other distribution	Professional, scientific and miscellaneous
London clearing banks	1978 Nov. 15	5,173	4,370	410	704	66	1,124	971	1,897
	1979 Feb. 21	5,652	4,863	466	637	77	1,143	1,051	2,278
Scottish clearing banks	1978 Nov. 15	732	623	97	81	35	112	114	294
	1979 Feb. 21	760	656	96	91	36	113	120	304
Northern Ireland banks‡	1978 Nov. 15	193	193	—	—	6	76	58	58
	1979 Feb. 21	205	205	—	27	8	76	28	66
All banks	1978 Nov. 15	14,453	9,218	1,621	2,883	784	1,793	3,579	3,792
	1979 Feb. 21	15,205	10,073	1,666	2,757	881	1,820	3,730	4,352
of which in sterling	1978 Nov. 15	9,218		872	214	544	1,741	2,344	3,503
	1979 Feb. 21	10,073		985	191	643	1,773	2,460	4,021
Changes: in sterling	1978 Aug./Nov.	+367		+25	+92	+38	+136	−14	+89
	Nov.78/Feb.79	+855		+113	−23	+99	+32	+116	+18
in foreign currencies adjusted for exchange rate effects§	1978 Aug./Nov.	+188		−67	+158	−13	−1	+96	+16
	Nov.78/Feb.79	+11		−57	−54	+4	−4	+73	+49

* Including lending under special schemes for domestic shipbuilding. ‡ The analysis provided by Northern Ireland banks differs slightly from other banks. Chemicals and allied industries are included indistinguishably in "Other manufacturing"; Metal manufacture, Electrical engineering, Shipbuilding and Vehicles in "Other engineering and metal goods"; and Transport and communications in "Public utilities and national government." § The figures exclude as far as possible the effect of changes in exchange rates on the sterling value of advances in foreign currencies.

WEEK'S FINANCIAL DIARY

The following is a record of the principal business and financial engagements during the week. The Board meetings are mainly for the purpose of considering dividends and official indications are not always available whether dividends concerned are interims or finals. The sub-divisions shown below are based mainly on last year's timetable.

TODAY

COMPANY MEETINGS—
Allied Textile, Registered Office Highburton, Nr. Huddersfield, 11
Debenture Corp., Winchester House, 100, Old Broad St., 12
Neil and Spencer, RAC Country Club, Woodcote Park, Epsom, Surrey, 12
Western Inv. Tst., 175, West George St., Glasgow, 11

BOARD MEETINGS—
Finals:
Brammer (H.)
Erith
Freemans (London SW9)
Hyman (I. and J.)
Johnson (Thomas)
Lowell (G. F.)
Low and Bonar
MacFarlane Grp. (Clansman)
Mersey Docks and Harbour
Ocean Transport and Trading
Lovell Meat Houses
Reckitt and Colman
Interim:
Scottish Met. Property

DIVIDEND & INTEREST PAYMENTS—
AAH 6p.Pf. 2.1pc
AC Cars 0.425p
APV Hldgs. Ln. 5 pc
Aberdeen Inv. 10 cts
Albion 1p
Allied Textile 4.22175p
Argus Press 7½pcPf. 2.625pc
Armitage Shanks 2.01p
Australia 5½pc Reg. 81-82 2¾pc
BAT Inds 4.54p
Baker Perkins 7pcPf. 2.45pc
Baldwin (H. J.)
Beaumont Props. Ln. 4pc
Berwick Timpo 0.88p
Birmid Qualcast 3.476p
Blundell-Permoglaze 2.06p
Bristol Waterworks 7p.Pf. 1973 2.376p
Caledonian Inv. Tst. 5½pcPf. 1.925pc
Caravans Intl. 2.054p
Cooper Industries 0.2p
Daily Mail and General Tst. 5pcPf. 1.75pc
De La Rue 3.3p
Drury (Henry) and Sons 5pcPf. 2.1pc
Eastbourne Waterworks 4.2pc
Empire Plantations and Inv. 1.32p
English and Dutch Inv. Tst. Particip. Certs. Fls 4.5 (1978)
Esperanza Trade Transport 2.2p
Evode Hldgs 0.7964p
Galliford Brindley 1.125p
General Investors and Trustees Deb. 1½pc
Glanfield Lawrence 8pcPf. 2.8pc
Glass and Metal 3.378p
Glass Glover 1.1103p
Gopeng Cons. 5.5p
Hallite Hldgs. 2.15p
Hartlepool Water 3.5pc (fmly. 5pc) 1.75pc
Heron Motor 2p
Hickling Pentecost Ord 2.8p
Hill and Smith 2.25p
Homfray 1.8125p
Howard Machinery 0.57p
Howard Tenens Services Deb. 3½pc
Illingworth Morris 6½pcPf. 2.275pc
Imperial Grp. 4.07p
Industrial and Gen. Tst. 4½pcPf. 1.575pc
Jamaica 8½pc Stk. 1981-83 4¼pc
Kenning Motor 2.88p
Kent (George) Dbs. 3 3½pc. Ln. 4pc
LRC Intnl. 0.695p
Laurence Scott 2p
Lindustries 3.3p. 6pcPfd. 2.1pc
Lloyds Bank 5.5137p
London Cremation 10pcPf. 3.5pc
Lovell (Y. J.) 2.85p
Magnet and Southerns 2.605555p
Mansfield Brewery Ln. 3½pc
May and Hassell Deb. 4½pc
Metal Box 4.9pcPf. 2.45pc
Mid-Kent Water 7pcPf. 3.5pc. 8pcPf. 1.44pc
Newmark (Louis) 7½pcPf. 2.625pc. 8pcPf. 2.8pc
North Surrey Water 3.85pcPf. 1.925pc. 4.2pcPf. 2.1pc. 4.2pc (fmly 6pc) Pf. 2.1pc 4.55pc (fmly 6½pc) Pf. 2.275pc. 5.425pcPf. 2.7125pc. 9pcPf. 4.5pc. 3.15pcPf. 1.575pc
Pauls Whites 5½pcPf. 1.925pc
Pennkalen 2p
Peninsular and Oriental 5pcPfd. 1.75pc
Property Security Inv. Tst. 0.5p
Redman Heenan Intl. 1.015p
Republic New York Corp 50 cts
Rickmansworth Uxbridge Water 2.8pc (fmly 4pc) Pf. 1.4pc. 4.9pc (fmly 7pc) Pf. 2.45pc. 4.025pc (fmly 5¾pc) Pf. 2.0125pc. 4.55pc (fmly 6½pc) Pf. 2.275pc. 10pcPf 5pc. 7pcPf. 2.159pc. Dbs. 2. 2½. 3½. 3¾. 6½pc
Saville Gordon (J.) 0.5p
Scottish Agric. Inds. Ln Stks. 7.5p
Scottish Eastern Inv. Tst. Db. 2½pc
Scottish Ontario Inv. 5pcPf. 1.75pc
Sears, Roebuck 32 cts.
Second Alliance Tst 2p. 4½pcPf. 1.575pc
Shakespeare (Joseph) 7pcPf. 2.45pc
Shell Transport 5½pcPf. 1.925pc
Southampton 6pc 3pc
Sterling Industries 0.4p
Stewart Wight 3p. 6pcPf. 2.1pc
Stirling 7½pc 3¾pc
Stocks (Joseph) 1p
Stott Bros 5pcPf. 1.75pc
Sunderland South Shields Water 4.35pc (fmly 6½pc) Pf. 2.275pc. 8pcPf. 4pc. 9pcPf. 4.5pc. 3.5pc (fmly 5pc) 1.75pc. 3.5pc (fmly 5pc) 1.75pc. 2.8pc (fmly 4pc) Pf. 1.4pc. 3.5pc (fmly 5pc) Pf. 1.75pc. 3.85pc (fmly 5½pc) Pf. 1.925pc. 4.2pc (fmly 6pc) Pf. 2.1pc. 4.2pc (fmly 6pc) Pf. 2.1pc
Sunley (Bernard) Inv Tst 1.65375p
Textured Jersey 1p
Thwaites (Daniel) 5pcPf. 1.75pc
Tomkins (F. H.) 0.5p
Trident Tele A 2.227p
Trust Union 4½pcPf. 1.575pc
Trustees Corp Dbs. 1½. 3¾pc
Unigate 1.5p
Unilever Dbs. 2. 3½pc
Union Bankcorp 23 cts
Unitech 1.675p
Vita-Tex 1.6p
Wade Potteries 4.2pc 2.1pc
Ward (Thos. W.) Ln. 3½pc
Wearwell 0.3p
Wedgwood 5pcPf. 1.75pc
Wilkinson Match 4.22297p
Williams Hudson 8p.Pf. 2.8pc
Wilson Bros. 0.71147p
Winterbotham Strachan Playne 6pcPf. 2.1pc
Wintrust 1.0548p

Woolcombers 7½pcPf. 3.625pc. 6pcPf. 2.1pc
Xerox 63 cts

TOMORROW

COMPANY MEETINGS—
Beaumont Props., Winchester House, 100, Old Broad Street, EC, 2.30
Grindlays Hldgs., 23, Fenchurch St., EC, 11.30
Marchwiel, Grosvenor Hotel, Chester, 11
Pentland Inv. Tst., 3, Albyn Place, Edinburgh, 12

BOARD MEETINGS—
Finals:
American Tst.
Bank of Scotland
Birch and Edginton
Harrison and Sons
Law Land
Sketchley
Interims:
Burndene Invs.
Kalamazoo
Nashall? Jamesi

DIVIDEND & INTEREST PAYMENTS—
Anglo-American Securities Corp. 2.3p
Beaumont Properties 1.898914p
Bert Boulton 3.3p
Colonial Securities Tst. Did. 6.5p
Debenture Corp. 1.98p
Granada Grp. A 1.46375p
London and Montrose Inv. Tst. 2p
Marchwiel 3p
Meggitt Hldgs. 0.4195p
Midland Industries 0.631094p
Nat. Westminster Bk. 7.15037p
Plastic Constructions 1.56p
Throgmorton Secured Growth Tst. 0.6125p
Victor Products (Wallsend) 10pcPf. 4.939pc

WEDNESDAY, APRIL 4

COMPANY MEETINGS—
Bath and Portland, 20, Manvers St., Bath, 12
Carrington Viyella, The Dorchester, W. 12
Drayton Far Eastern Trust, 117, Old Broad St., E.C., 12.15
Foreign and Colonial Inv., 1-2 Laurence Pountney Hill, E.C., 12.30
IDC Grp., Stratford-upon-Avon, Warwickshire, 3.30
Macpherson (Donald), Winchester House, 100, Old Broad St., E.C., 12
Securicor Group, Eccleston Hotel, Eccleston Sq., S.W., 12.30
Sterling Trust, Bucklersbury House, 11, Walbrook, City of London, 3.30
Whittingham (William), Midland Hotel, New St., Birmingham, 12
Yeoman Inv. Trust, 8, Waterloo Place, S.W., 11

BOARD MEETINGS—
Finals:
Bridon
Chersonese (FMS) Ests.
Dinkie Heel
Hiltons Footwear
Jacks (William)
Lyon and Lyon
Phoenix Assurance
Southampton IOW and S. England Royal Mail Steam Packet
Sun Alliance
Transatlantic Market Tst.
Interims:
Burns-Anderson
Consd Gold Fields
MTD (Mangula)
Peachey Property
Peters Stores

DIVIDEND & INTEREST PAYMENTS—
Allied Insulators 2.9375p
Amalgamated Ord. A 0.262635p
Bath and Portland 2.014p
Blagden and Noakes 5.4p
Burtonwood Brewery (Forshaws) 7pcPf. 2.45pc
Carliol Inv Tst. 3p. 4pcPf. 1.4pc
Cawan de Groot 0.8p
Crossfriars Tst. 1.35p
Estates Property Inv. 1.5p
Guthrie Corpn. 6p
Jarvis (J.) 4.9p
Jentique 1.02995p
Jos Hldgs. 0.975p
Lonsdale Universal 3.5029p
MFI Furniture 2.196p
Midland Bank 9.94166p
Nesco Inv. 8.241p
New Throgmorton Tst. Inc. 0.39375p
Nu-Swift Industries 1.0263p
Provincial Properties Ord. A 0.5p
Scottish Western Inv. 1.85p
Securitor Grp 8½pcPfd.Pf. 8.724pc
Spencer Clark Metal 1.43
Stothert and Pitt 2.65p
Tate and Lyle 4.06p (o/a 30/9/78). Drd. 2.5p (o/a 30.9.79)
Tyneside Inv. Tst. 5pcPf. 1.75pc. Do. 2.93p
Viners 0.5p
Wagon Finance 1.678125p
Warren Plantations 2.345p
Witter (Thomas) 2.8413443p
Yeoman Inv. Tst. 5.625p

THURSDAY, APRIL 5

COMPANY MEETINGS—
Crouch (Derek), Great Northern Hotel Peterborough, 12
Ladies Pride Outerwear, 346 St. Saviour's Road, Leicester, 11.45
Law Debenture Corp., Estates House, 66, Gresham St., E.C., 11.30
Sedgwick Forbes Bland Payne, Sedgwick Forbes House, 33, Aldgate High St., E.C., 12
Thermal Syndicate, Royal Station Hotel, Newcastle upon Tyne, 2.15

BOARD MEETINGS—
Finals:
Bowater Con.
Brit. Printing Con.
Brown Boveri Kent
Cadbury Schweppes
Carron
De Vere Hotels and Restaurants
East Rand Cons.
Grampian Hldgs.
GKN
Ladbroke
(F. J. C.)
London Brick
Morgan Crucible
Morrison (William) Supermarkets
Ofrex
(Henry)
Taylor Woodrow
Interims:
Burgess Prods.
Mitchell Cotts
Scaptrite Ens.

DIVIDEND & INTEREST PAYMENTS—
Alan 9½pcBds.Red. 1/10/80 4¾pc
Agricultural Mortgage Corp. 6½pcDb. 1992-87 3pc
Annuities 2½pc 1¼pc. Do 2¾pc 1⅜pc
BCC Intnl. 1.85075p
Bradford Property Tst. Ln. 3½pc
Cement Roadstone 7pcAPf. 2.45pc
City Acre Property and Inv. Deb. 5.1pc
Consolidated 2½pc 1¼pc
Crouch (Derek) 3.111p
Drayton Far Eastern Trust 0.725p
East Lancashire Paper 2.176p
Edinburgh Inv. Tst. Deb. 2½pc
English and Scottish Inv. Ord. 2.05p B 0.0875p. 5pcPf. 1.75pc
Funding Ln. 5¾pc 1987-91 2⅞pc
Greater London 9¼pc 1980 4⅝pc
Greenall Whitley Lns. 3½ 4¼pc
ICI 8.465556p
London and Lomond Inv. Tst. 1.8p
London County 5pc 1980-83 2½pc
Lonrho 4.25p
M and G Australasian and Gen. Fd. Inc. 0.42p
Macpherson (Donald) 1.69284p
Makin (J. and J.) Paper Mills 0.484p
Metropolitan Water Board Grand Junction W.W. 3pcDb. 1½pc. W. Middlesex W.W. 3pcDb. 1½pc
Newbold and Burton 2.137345p
Norrington (Henry) 0.4352p
Pratt (F.) Engineering Corp. 3.5823p (inc. supp. dist. of 0.3479 o/a 31/10/77)
Securicor Grp. Ord A 1.7378p
Security Services Ord. A 2.303p
Stocklake Ord. 0.85p
Strong and Fisher 2.08p
Thermal Syndicate 4p
Treasury Ln. 2002-06 4pc 3pc 1½pc
UC Invsv. 28 cts.
Watney Mann and Truman Debs. 1½ 2¼pc

FRIDAY, APRIL 6

COMPANY MEETINGS—
Brit. American and Gen. Tst., 20, Fenchurch Street, EC, 11.30
London Inv. Tst., 96-98, Marsham Street, SW, 10.30

BOARD MEETINGS—
Finals:
Firmin
Miller (F.) Textiles
Pearl Assurance
Scottish TV
Unicorn Inds.
Upton (E.)
Interim:
Medminster

DIVIDEND & INTEREST PAYMENTS
ACE Machinery 3.828p (inc supp d 0.051p o/a yr 30/9/77)
Arrow Ord A 1.5p
Agricultural Mort. Corp. 10½pc Bds 12/10/79 5¼pc
Austin (James) Steel 2.5p
Bampton Property Ln. 3½pc
Barr (A. G.) 1.6777p (inc supp dis 0.0225p o/a yr. 29/10/77)
Benn Bros. 0.9p
Berisford (S. W.) 2.68125p (inc 0.02 add pymnt to int. div.)
British Electric Traction Dfd. Ord. 1
Britains 4.2pcPf. 2.1pc
Brown and Tawse 1.3735p (inc supp d 0.073p o/a yr 31/3/78)
Brown (John) Ord. 7p
Bulmer (H. P.) 2.479p
Camford Eng. (inc supp dis 0.03p o/a yr. 30.9.77)
Campari Intnl. 1.419p
Capital National Tst. 1.75p
Christie-Tyler
City Offices 0.79579p
Coleman (E. Alec) Invs. 4½pc
Continuous Stationery 0.9p
Countryside Props. 1.675p
Dale Electric Intnl 1.4p
Dewhurst Partner A 0.642p
Finlas Hldgs. 3.85p
Ferndon Colonial Inv Tst 3.275p
Hawthorn (R. W.) Leslie 1p
Henlys 5.71p
Int Timber Corp New 3p
Jones Stroud 2p
Ladies Pride Outerwear 1.209p
McMullan 6½pcPf. 2.3625pc
Mnsmutual Mort. Realty Invs. 34 cts
Meldrum Inv Tst. 1.35p
Pentland Inv Tst. 3.05p
Plessurama 1.65p
Polymark Intnl. 1.52p
Pratt (F.) Ln 3½pc
Press Tools 0.725p
Prestige Group 3.776p
Ranson (William) 1.297p
Reliance Knitwear 1.54p
Saatchi Saatchi 2.74p
Smallshaw (R.) (Knitwear) 2.5p
Southwark 11¼pc Red. 84-85 5⅝pc
Steinberg Grp. 0.32p
Sterling Tst. 4.1p
Stoddard Ord. A 0.532p
Stonehill 3.5p
Swan Hunter 39p (1st liq. dist.)
Thames Plywood Manf. 1p
Trafford Carpets 1p
United Scientific 3.09p
Whitbread Ln. 4½pc
Wholesale Fittings 2.25p

SATURDAY, APRIL 7

DIVIDEND & INTEREST PAYMENTS—
Agricultural Mortgage Corp. Var. Rate Bds. Red. 1/10/82 £5.8063. Var. Rate Bds. Red. 1/10/82 £5.8063
Francis Industries Ln. 4½pc
McCarthy Pharmaceuticals 1.5p
Trust Houses Forte 7.78p
Yorkshire Fine Woollen Spinners 2p

SUNDAY, APRIL 8

DIVIDEND & INTEREST PAYMENT—
Denmark 5½pc 20-yr. Ext. Ln. 1954 2¾pc

Sotheby's to auction Viking bracelet

A 1,000-YEAR-OLD Viking bracelet found on a beach at Paignton, Devon, is expected to fetch £3,000 in auction at Sotheby's, Belgravia, on June 5.

It was discovered by Mrs. May Creasey, aged 29, of Coult Avenue, North Hykeham, Lincoln, while on honeymoon, searching for shells.

The bracelet is 99 per cent pure gold. A treasure trove inquest at Torquay decided last month that it was Mrs. Creasey's property. She took it to British Museum officials who advised her to go to Sotheby's.

Architecture medal for Eames

THE Royal Gold Medal for Architecture has been awarded to the office of Charles and Ray Eames, the American design partnership begun in 1941 by Charles Eames, who died last August, and his wife, Ray.

The Royal Institute of British Architects said that the citation pays tribute to the partnership's record of "innovation and excellence in such diverse fields as architecture, furniture design, and, more recently, communication through the medium of films, graphics and exhibitions."

LEGAL NOTICES

No. 00872 of 1979

In the HIGH COURT OF JUSTICE Chancery Division Companies Court. In the Matter of LIDEN PLASTICS LIMITED and in the Matter of The Companies Act, 1948.

NOTICE IS HEREBY GIVEN, that a Petition for the Winding up of the above-named Company by the High Court of Justice was on the 21st day of March 1979, presented to the said Court by BEGG & CO THERMOPLASTICS LIMITED whose registered office is situate at 37, St. Margaret's Street, Canterbury, Kent, and that the said Petition is directed to be heard before the Court sitting at the Royal Courts of Justice, Strand, London WC2A 2LL, on the 30th day of April 1979, and any creditor or contributory of the said Company desirous to support or oppose the making of an Order on the said Petition may appear at the time of hearing, in person or by his counsel, for that purpose; and a copy of the Petition will be furnished by the undersigned to any creditor or contributory of the said Company requiring such copy on payment of the regulated charge for the same.

HERBERT OPPENHEIMER, NATHAN & VANDYK,
20, Copthall Avenue,
London EC2R 7JH.
Ref: TI/SRO. 78 66148.
Solicitors for the Petitioner.

NOTE.—Any person who intends to appear on the hearing of the said Petition must serve on, or send by post to, the above-named notice in writing of his intention so to do. The notice must state the name and address of the person, or, if a firm, the name and address of the firm and must be signed by the person or firm, or his or their solicitor (if any) and must be served, or, if posted, must be sent by post in sufficient time to reach the above-named not later than four o'clock in the afternoon of the 27th day of April 1979.

No. 00842 of 1979

In the HIGH COURT OF JUSTICE Chancery Division Companies Court. In the Matter of MEREWORTH ESTATES LIMITED and in the Matter of The Companies Act, 1948.

NOTICE IS HEREBY GIVEN, that a Petition for the Winding up of the above-named Company by the High Court of Justice was on the 19th day of March 1979, presented to the said Court by BARCLAYS BANK LIMITED whose registered office is at 54 Lombard Street, London, E.C.3, and that the said Petition is directed to be heard before the Court sitting at the Royal Courts of Justice, Strand, London WC2A 2LL, on the 30th day of April 1979, and any creditor or contributory of the said Company desirous to support or oppose the making of an Order on the said Petition may appear at the time of hearing, in person or by his counsel, for that purpose; and a copy of the Petition will be furnished by the undersigned to any creditor or contributory of the said Company requiring such copy on payment of the regulated charge for the same.

DURRANT PIESSE,
73 Cheapside,
London EC2V 6ER.
Ref: GFM/DSB/BKH. 3442.
Solicitors for the Petitioner.

NOTE.—Any person who intends to appear on the hearing of the said Petition must serve on, or send by post to, the above-named notice in writing of his intention so to do. The notice must state the name and address of the person, or, if a firm the name and address of the firm and must be signed by the person or firm, or his or their solicitor (if any) and must be served, or, if posted, must be sent by post in sufficient time to reach the above-named not later than four o'clock in the afternoon of the 27th day of April 1979.

NOTICE IS HEREBY GIVEN that Mohammed Afzal Javaid of 229 Gt. Portland Street, London W1N 3HD is applying to the Home Secretary for naturalisation and that any person who knows any reason why naturalisation should not be granted should send a written and signed statement of the facts to the Under Secretary of State, Home Office (Nationality Division), Lunar House, Wellesley Road, Croydon CR9 2BY.

COMPANY NOTICES

IPS INDUSTRIEVERPACKUNGS-UND SERVICE AKTIENGESELLSCHAFT ("IPS")

NOTICE TO HOLDERS OF BEARER SHARES OF DM50 NOMINAL VALUE EACH

NOTICE IS HEREBY GIVEN that a cash offer of DM28.61 per Share subject to certain conditions has been made by a German resident company for the whole of the issued share capital of I.P.S. I.P.S. is not Listed on any Stock Exchange.

Acceptances must be received by 3 p.m. on 20th April 1979. Shareholders are therefore advised to make immediate contact with:
VICKERS DA COSTA LIMITED,
(Reference RHW),
Regis House,
King William Street,
London, EC4R 9AR.
Telephone (01-623-3494).
Telex London 898004).

CANADIAN PACIFIC LIMITED (Incorporated in Canada)

ONTARIO & QUEBEC RAILWAY COMPANY 5% DEBENTURE STOCK

In preparation for the payment of the half-yearly interest payable on June 1 next, the Debenture Stock Transfer Books will be closed at 3.30 p.m. on May 1 and will be re-opened on June 2.

W. E. REEVE, Deputy Secretary.
50 Finsbury Square,
London EC2A 1DD.
April 2, 1979.

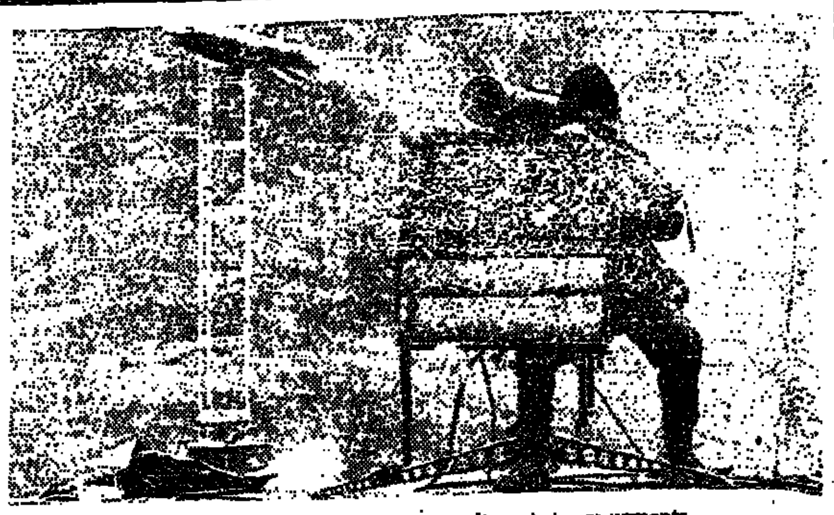
TRAVEL

FOREIGN HOTELS

CLUBS

THE MANAGEMENT PAGE

EDITED BY CHRISTOPHER LORENZ



Claes-Ulrik Winberg (left)—concentrating his mind on getting the right diversification mix; a spent acid plant (centre) and the RBS 70 laser-guided anti-aircraft missile gun illustrate Bofors' expansion into chemicals and its continuing commitment to armaments.

Bofors sets its sights on a new diversification target

BY WILLIAM DULLFORCE

WHAT DOES a world-renowned arms manufacturer based in a neutral country do, when its domestic market threatens to shrink and public opinion strongly favours disarmament and curbs on trading in weapons? Exploit its technological know-how in less controversial fields and diversify quickly, is the obvious response.

But Bofors has been in and out of "civil" production for the past century or so and in the view of Claes-Ulrik Winberg, managing director of the Swedish armaments group, diversification is too glib an answer. Since he took over in 1973 he has eliminated some 20 product groups from the company's range—including some of its steel interests—but he feels that Bofors is still too diversified.

It does not pay, he argues in contradiction of much previous Bofors' thinking, to move into products which the company's workshops have no experience of manufacturing and which call for a widely different marketing and financing approach. This philosophy is born of experience. The ordnance division has continued to be the main source of Bofors' profits, whereas several attempts at diversification have not turned out well.

Bofors' strength has lain in its engineering and technical skills. It has been orientated to product development rather than to marketing. Its main customers have been governments and defence procurement departments and it has not been geared to meet the demands of a variegated industrial market.

The policy evolved by Mr. Winberg, therefore, has been to develop profitable, new operations out of the group's existing skills aimed at a product market of which it already has experience. This is why Bofors has decided to concentrate on chemicals as a second pillar alongside its ordnance activities and is tackling the U.S. market.

Bofors Nobel, the chemicals and plastics division under a young general manager, Per-Olof Norberg, currently has a turnover of around Skr 600m (£68m, $138m) which is less than a quarter of total group sales and half the ordnance division's turnover. But its operating profit has grown from Skr 5m in 1974 to Skr 43m last year.

The link with armaments comes through explosives and propellants. In producing the ammunition for its weapons and the fuels for its missiles Bofors had to develop techniques for the safe treatment of explosives and acid concentrations. Bofors Nobel aims to cash in on these techniques by providing specialised materials and services for the chemical and pharmaceutical companies.

Dangerous

Parallel with its explosives production Bofors has specialised in nitration and nitric acid oxidation processes. More recently, to meet new pollution and environmental requirements, it has had to develop techniques for handling the "spent acids" left by the processes. As a result it is now able to take over for other companies the processing of their raw materials and the handling of dangerous wastes, which is often a costly and embarrassing overhead for them.

Pharmaceutical companies, in particular, want to put their money into research and development and into marketing. For an individual company the nitration processing of its chemicals is a small volume but difficult operation with potential pollution problems. Bofors Nobel offers to produce these chemicals at its specialised plants, saving its customers the investment and the pollution headache.

Already the division sells 90 per cent of its chemicals abroad, its largest markets being in West Germany and the UK. But the greatest potential lies in the U.S. and, at a later stage, possibly in Japan. In Europe transport overheads are not a problem because the business is in specialised, not bulk, chemicals, but to tap the U.S. market Bofors Nobel acquired a small company, Lakeway Chemicals Inc., Michigan, in October 1977.

It is now in the process of extending its technology to Lakeway. A spent acid plant will come on stream in the autumn and a new nitration plant should provide extra capacity next year. The possibility of buying up another American company is being evaluated. Mr. Norberg hopes to get U.S. sales up to SKr 150m a year by 1981 and anticipates a 10 per cent annual volume growth thereafter.

The Swedish-based Nobel Kemi remains the largest unit in Bofors Nobel with 40 per cent of its contracts still coming from military customers. A third unit, Nobel Chematur, which has been operating since the 1930s as a chemical engineering contractor, mostly in designing explosives factories, can also benefit from the division's new venture.

The decision to expand on the chemicals side was taken in 1976, when a three-year SKr 200m programme was adopted. It is almost complete. Half or more of the investment has gone into environmental improvements and another large chunk into renovating the existing plant at Karlskoga, so that it is only now that the real expansion of capacity is coming through.

Bofors Nobel is not yet generating enough profit to finance its own investments but Mr. Norberg's target is to contribute to group cash flow by 1982. His fourth operation, plastics, could provide problems. The odd one out, it does not share the basic technology of the other three units, producing plastic components for cars, trucks and caravans on the civilian side and missile tubes on the defence equipment side. After taking over the plastics operation of the Trelleborg company last year, Bofors currently has considerable over-capacity in plastics and some rationalisation is needed.

While chemicals are regarded as having the greatest growth potential, more than three-quarters of the group's Skr 2.8bn (£320m, $645m) turnover is still being generated by the ordnance, steel and other engineering operations. Bofors is in no mood to abandon the profits of its weapons manufacturing and attitudes towards the future of the ordnance division at Karlskoga headquarters are by no means defeatist, but steps have already been taken to reduce the group's exposure on the loss-making steel side and on Bofors-Nohab, the diesel engine and turbine company.

Bofors has just reported improved pre-tax earnings of Skr 117m for 1978 but as in the previous year the figure hides the wide gap between the profit contribution from armaments and—more modestly—chemicals and the losses sustained by the steel and engineering operations. The advance payments made under the armaments contracts are also the main source of the good financial income which boosts the pre-tax result.

The uncertainty shrouding the future on the arms side makes it all the more imperative for the management to pare away its cash-consuming operations. The profit criterion is being re-emphasised and one suspects that Mr. Winberg would happily get rid of the whole steel business.

The ordnance division furnished sales of over Skr 1.2bn last year but, allowing for the explosives and propellants supplied by the chemicals division, Bofors' reliance on defence contracts is proportionally rather larger. Roughly half the group's 14,000 employees work on military contracts. At Karlskoga some 5,500 of the 8,500 employees are directly or indirectly involved in weapons and ammunition production.

Mr. Winberg believes that the ordnance division has probably reached its maximum size. The cuts in Swedish defence spending already foreshadowed mean that, to maintain the present volume of production, more export contracts will have to be won. Over the last two years about 55 per cent of Bofors' weapons and ammunition output has gone to the Swedish defence forces. That proportion will gradually be reduced, possibly by as much as half.

The prospects for increasing export sales, it is felt in Karlskoga, depends more on political attitudes than on having the right products. Recently, the foreign affairs committee of the Swedish Parliament voted unanimously for a re-examination of the regulations governing Swedish weapons exports.

The government has also set up a commission to investigate the opportunities for the armament industry to switch to "alternative" production. "Forget it," Mr. Winberg says bluntly, "there is no alternative."

Bofors makes guns and missiles to Swedish specifications which ensure that they are fundamentally defensive in nature. This "lock on the door" attitude to defence attracts countries which share Sweden's neutral strategy, and developing countries, whose governments feel the need for a deterrent defence.

Foreign demand for Bofors' weapons is undoubtedly strong, but the politics of Swedish arms exports are complex in the extreme. Bofors sells to NATO countries. Its power-operated L/70 40mm gun, the successor to the one which defended Britain in the second world war, is the main anti-aircraft weapon in many countries' defence. The third generation, system 75, using a proximity fuse and a pre-fragmented shell is in the final stages of competition with the Swiss Oerliken for a U.S. order.

Bofors' portable anti-aircraft missile, the RBS 70, has been bought by Norway and is being evaluated by other NATO countries. It is being developed for use at night. The 155mm FH 77 mobile howitzer has also attracted foreign attention.

Swedish politicians have to balance ideals and attitudes to world disarmament against the tradition that the country's own defence forces should not rely solely on foreign suppliers and the knowledge that domestically produced weapons are cheaper, if manufactured in larger series than required by the Swedish forces. In practice Swedish authorities have been fairly pragmatic and Bofors has not been deterred from planning its export drive.

But the Government and the Defence Procurement Organisation have been keen recently to concentrate domestic arms production, particularly on the missile side. Last year Sweden's two producers established the Saab-Bofors Missile Corporation for joint design, development and production of the next missile generation.

Military

If Mr. Winberg has to adjust to the political wind for the half of the group involved with military contracts, he is able to take straightforward business decisions in the other half. The steel operation, which has been operating at a loss for three years, has been trimmed, a reconstruction of the drop forging plant is planned and a partner has been found for the diesel engine operation.

Although in the 1870s Bofors was the first company in the world to cast a gun from steel, there is now virtually no link between its steel and armaments sides. In steel it has had two main operations, the production of high-alloy tool and construction steels and a forge producing chiefly heavy lorry crankshafts. The first operation has been effectively dropped from the beginning of this year under an agreement with the Uddeholm company.

Bofors' SKr 400m plan for the erection of a new drop forging plant at its Kilstaverken works in a joint venture with Sumitomo, which would have supplied the new press, suffered a setback when the Japanese company withdrew. The new press would substantially enlarge crankshaft output and therefore calls for a larger market. There is probably room for no more than four such presses in Europe; two are already operating and a third is being considered. The alternatives for Bofors are to find another partner with both finance and market access, to persuade the Swedish Government to finance a smaller forge or to abandon the whole crankshaft business.

From the other loss-making company, Bofors-Nohab, diesel engine production was transferred last year to a new company which Bofors owns jointly with the Finnish Wärtsilä concern. The idea behind this move was similar to that which prompted the dropping of the tool steel business—that it would be better off outside the Bofors group. Through the Finnish market and Wärtsilä's contacts with the Soviet market the venture, it is hoped, will have the scope to develop new engines.

Bofor's history goes back to the middle of the 17th century when a hammer forge was built at Boda fors (meaning stream), close to its present Karlskoga headquarters. Alfred Nobel, founder of the Nobel prizes, took over the company in 1894, introducing the ammunition and explosives business with its complementing chemicals production.

After all the twists and diversifications of the intervening years the Bofors which Mr. Winberg is taking into the 1980s remains fundamentally that of Alfred Nobel, an armaments and chemicals concern. The cobbler has found it best to stick to his last.

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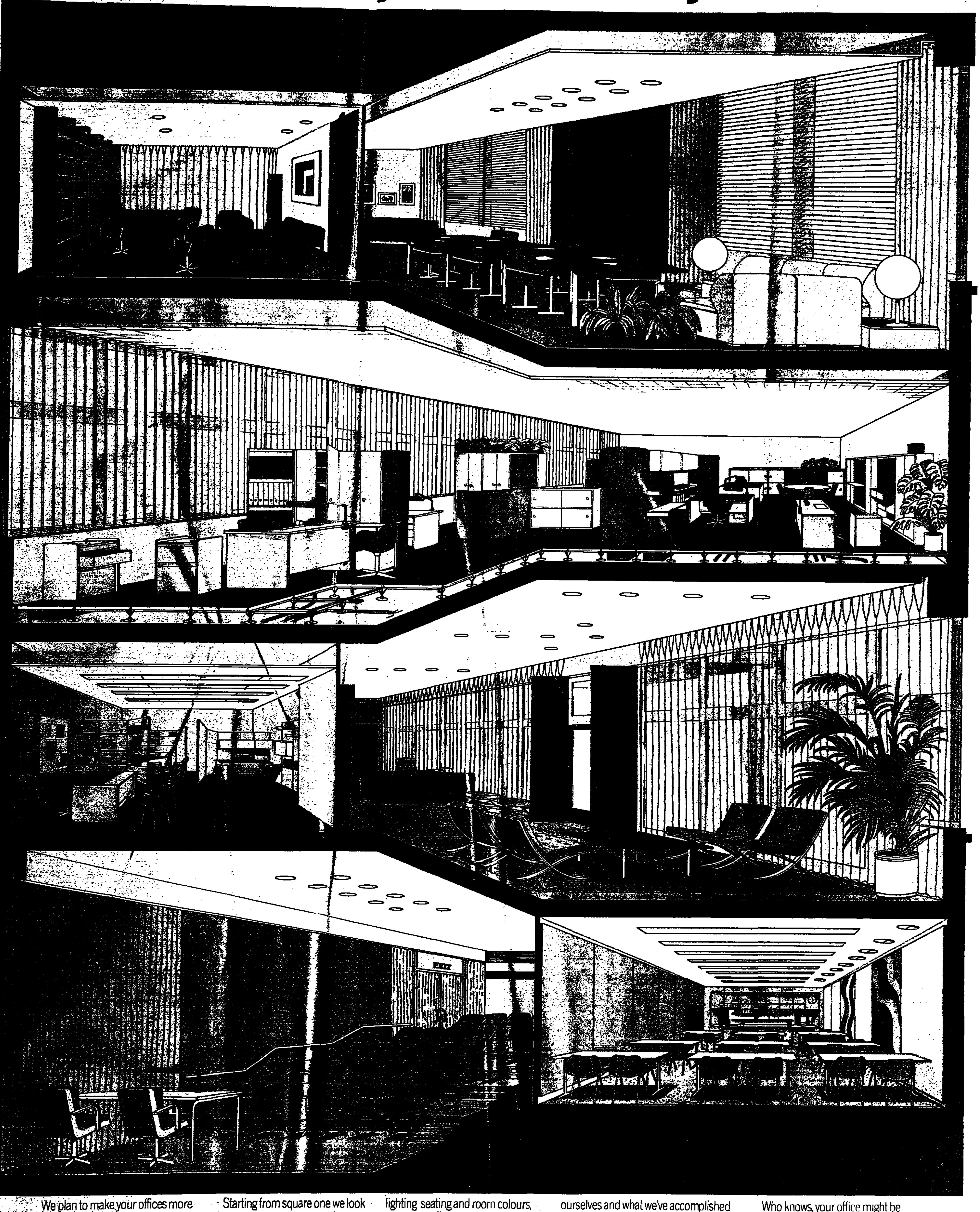

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LOMBARD

Case for a new wage formula

BY SAMUEL BRITTAN

THE CASE for indexation to minimise the damage caused by high, variable and uncertain rates of inflation — and also as a useful accompaniment to more fundamental policies designed to bring the rates down — has frequently been given in these columns. But unlike peace, indexation is divisible.

The strongest case is on the fiscal side. This is simply to prevent governments from increasing the tax burden surreptitiously as a result of the automatic effects of inflation (fiscal drag) or changing the degree of progression, or shifting the burden between direct and indirect taxes.

Business

The case for wage indexation is a little more problematic because it is more open to abuse. One unfortunate example was the Heath thresholds which contributed to the wage explosion of 1974-75. Every time one goes to Italy one hears of the scala mobile, which adds cost of living compensation to normal wage settlements and is regarded by the IMF and other analysts as one of the main obstacles to financial stability.

These are arguments, however, against the wrong sort of wage indexation at the wrong time.

A plausible formula has been put forward by Richard Layard of the London School of Economics in his Colston Research Society annual lecture given last week. His basic argument is that the search for consensus in relativity adjustments is doomed to failure, but that some progress would be made by a formula which ensured at least rough stability, so that the value of a settlement did not depend on guesswork about the size of later settlements, or on the overall inflation rate.

The principle is that a new settlement should grant a worker a real wage equal to the average level of his earnings over the last 12 months; allowing, in other words, for half the annual inflation rate. From then on wages would be adjusted month by month in line with the retail price index. This would have the subsidiary advantage that after 18 months a worker's real wage, and his place in the pecking order, would be independent of his settlement date.

Layard's proposal requires elaboration. His formula can be used to provide a basic scale. But it is not possible to guarantee real wages for everyone all the time. All that true indexation can do is to provide a measuring rod which would allow negotiations to take place in real terms, so that the two sides did not have to guess about the general rate of inflation as well as conditions in their own industry. (There is an analogy here to a dated indexed security, which might sometimes yield a negative real rate of return.)

There would thus have to be provisions for percentage additions or subtractions to the scale. For instance, when there is a fall in real national disposable income, of the kind that occurred after the oil price explosion in the mid-1970s, there would have to be a percentage deduction from the scale.

Opinion

It should be possible to write into contracts provisions for referring to outside economic bodies, not necessarily governmental, for an opinion on whether conditions had arisen requiring a change in the basic scale. But once the cost of living adjustments had taken care of the effects of inflation, the further percentage changes designed to reduce or increase real wages could be very small.

Richard Layard presents this proposal as a form of incomes policy. This is, in my view, the worst way to launch it. Then it would have all the disadvantages of a norm; and every deviation from the scale would have to be negotiated in Downing Street. Wage settlements would once more seem a gift from the Government, rather than something that negotiators settled among themselves. Above all, the requirement is for individual experiment rather than a completely uniform approach.

Indeed, all that the Government needs to do is to stop discouraging indexed agreements, as it has been doing during the pay policy period. Naturally, employers are reluctant to offer cost of living compensation on top of a national norm, with some wage drift thrown in for good measure. But without a norm, and with some independent agreed procedure for adjustments in mid-contracts, different forms of indexation could develop a life of their own. The more the Government stays out of it, the better.

Sorting out tenants' families and Rent Acts

LEGISLATION giving tenants and their families protection against eviction from their homes continues to pose awkward problems for the courts. Two decisions recently in the Court of Appeal[1], following, distinguishing or commenting on (not always in a complimentary way) a chain of decisions over the years, is bound for the House of Lords. The problem is in essence very simple: who constitutes a member of the tenant's "family"? Or even simpler, what did Parliament mean by the use of the word "family" in a succession of Rent Acts?

The problem arises whenever a tenant protected by the Rent Acts dies. The law, ever since the first statutory intervention into leasehold premises during the First World War, has decreed that a member of the tenant's family was entitled to succeed to the protected tenancy. Until recent years the cases in the courts produced simple solutions. A member of the tenant's family had to be someone who was in a publicly recognisable family relationship, such as that provided by blood, marriage or adoption. Platonic relationships, however close and devoted, were insufficient to establish a familial nexus.

Lord Justice Asquith in 1950 put the matter in an outmoded judicial language. He could see nothing in principle on which it could be said that a man and woman who were not married could be members of the same family which would not require the court to predicate the same of two old cronies of the same sex innocently sharing a flat:

"If, on the other hand, the relationship involves sexual relations, it seems to me," he said, "anomalous that a person can acquire a 'status of irremovability' by living or having lived in sin, even if the liaison has not been a mere casual encounter but protracted in time and conclusive in character.

"To say of two people masquerading as husband and wife (there being no children to complicate the picture) that they were members of the same family, seems to me to be an abuse of the English language."[2]

Three years ago, the Court of Appeal faced the formidable opposition of such judicial precedent to any different legal attitude to change social habits.[3] A man lived with a woman as if she were his wife for 21 years until he died. They never married and had no children. After his death she remained in the house and paid the rent as if she were his widow. The landlord discovered the true relationship and sought possession of the house.

Two members of the Court wriggled out of the earlier precedent by saying that what constituted the family in 1950 did not necessarily bind them in 1975, and that if the popular meaning of the word had changed the courts could give effect to that change. Lord Denning simply said that the earlier decision was wrong and declined to follow it.

The majority's approach was to ask the question, what would the answer be to the question, who is the "member of the tenant's family" according to the understanding of the ordinary man. It was undeniable that a social revolution had taken place in the last 25 years in the attitude to illicit unions.

More and more couples are declining today to go through a ceremony of marriage but still live together, which for all intents and purposes has the hallmarks of the matrimonial state.

Any social stigma that did attach to such unions has lessened, if not altogether disappeared. The inaccurate, but traditionally expressive phrase "common law wife husband" is used to describe these relationships. The ordinary man, if asked would find such unions indistinguishable from the unions made licit solely by virtue of the marriage ceremony.

THE WEEK IN THE COURTS

BY JUSTINIAN

The burning question for a judge was: could effect be given to this changed social attitude, and consequent change in the scope of a common English word, without doing violence to the doctrine of judicial precedent? The two judges in the majority thought that it would be unduly legalistic to adhere to precedent when the social situation upon which the earlier decision was based had so radically altered. If language can change its meaning to accord with changing social conditions, then a decision on the meaning of that word in a statute before such change should not continue to govern thereafter.

In *Helby v Rafferty*[1] the defendant lived with a woman (a well-known journalist) who was the statutory tenant, from 1972 until 1977 when she died tragically. They did not marry and had no children. They shared the expenses of their joint home, going out together in a way that showed that each of their lives was bound up with the other's.

When she became ill he nursed her as a husband would be expected to do. At no time did she pretend that she was a married woman by using his name or by giving any hint to any person that they were a married couple.

The county court judge, having concluded that she had not married because she wanted to retain her independence and freedom to withdraw from the relationship without the awkwardness of having to untie the matrimonial knot, held that the relationship was not so permanent and stable as to justify the view that they were members of a single family. And the Court of Appeal agreed.

It distinguished the 1975 case by saying that the stability and the permanence of the relationship was the key issue, that that was a matter of fact for the trial judge and with them the court could not be upset.

If that case is virtually distinguishable from the 1975 case, the second case poses even more awkward questions, since the individuals could not even claim that their relationship simulated matrimony. In 1957 a young man aged 24 formed a relationship with a widow of 75, and a year thereafter lived with her in a flat of which she was the tenant. The widow paid the rent but other expenses were shared, neither being financially dependent on the other.

A close relationship grew up, such that they regarded themselves (as did other who knew them) as aunt and nephew. She died in 1976, whereupon he continued to reside in the flat and claimed to be her successor to the statutory tenancy. Again the Court of Appeal declined to say that they were members of the same family.

There is a strong suggestion in the judgments that, apart from blood ties, the only other relationships established by law, namely marriage and adoption, can qualify. Our law does not recognise any adoption of adults, only of children. One the relationship is other than a legal one or by blood, it becomes impossible even to exclude the mythical "two old cronies sharing a house."

If the family encompasses members of it who are related in a social and not merely a legal sense, then the homosexual couple (male or lesbian) may also qualify as a protected tenant if and when the partner dies. One way or another, the House of Lords is facing some tricky problems of a socio-legal nature. The result of its deliberations will be intriguing in more than one sense.

[1] [1979] 1 W.L.R. 3 and 13.
[2] *Gammons v Ekins* [1950] 2 K.B. 328.
[3] *Dyson Holdings Ltd v Fox* [1976] Q.B. 503.

National course needs scrutiny

RACING

BY DOMINIC WIGAN

WITH ONLY seven of the 34 starters for the Grand National having completed the course, and riderless animals creating havoc at the Chair, the time has surely come for a close inspection of the National course and its fences.

I have little doubt that a gap should have been left in the temporary running rail, erected on the first circuit between the 14th fence and the Chair, for had there been a filter there for loose animals to run out, the Chair would undoubtedly not have claimed nine victims.

Those to go at Aintree's most formidable fence through no fault of their own included Kintai, who broke his back; Ben Nevis; Godfrey Segundus; Rambling Artist; and The Champ.

There seems little question that the three or four loose animals who created the worst turmoil at a National fence since the race ground to a complete standstill at the 23rd in Foinavon's year of 1967 would have been only too pleased to opt out of proceedings had a filter been open to them.

As it was, they met the Chair at varying angles and with varying enthusiasm just in front of the leaders. Within a second or two the whole complexion of the race had changed.

It must be hoped that by next year every effort will have gone into providing "shoots" and minimising the severity of some fences, which seem beyond all but the outstandingly surefooted.

Even allowing that many runners came to grief through being brought down, it is disturbing that of the 27 who lined up for the National without having fallen this season, nine came down without suffering interference.

In a race attended by 66,000, 9,000 more than last year, and watched by 500m television viewers worldwide, the saddest moment undoubtedly came at Bechers second time round where Alverton was killed.

He was travelling well within himself at the time, according to Jonjo O'Neill and Mr. Snowman's rider, Graham Thorner. The latter commented: "He looked to be a different class to the rest at the time." Alverton died instantly through a broken neck.

NOTTINGHAM

2.00—Run Like Hell
2.30—Tuthill Bond**
3.00—Bad Love*
4.30—Cannon King***

Radio drama wins prize

THE CLERKS, a BBC drama first broadcast on Radio 3, is joint winner of the first Prix Futura for radio drama. It is worth DM 5,000 (£1,310).

The other joint winner is a Danish play.

TV/Radio

† Indicates programme in black and white

BBC 1

6.40-7.55 am Open University (Ultra high frequency only). 12.45 pm News. 1.00 Pebble Mill. 1.45 Over the Moon. 3.15 Songs of Praise. 3.53 Regional News for England (except London). 3.55 Play School (as BBC 2 11.00 am). 4.20 Cheggers Plays Pop. 4.40 Baggy Pants and the Nitwits. 5.00 John Craven's Newsround. 5.05 Blue Peter. 5.35 The Perishers. 5.40 News.

5.55 Nationwide (London and South-East only).
6.20 Nationwide.
6.50 A Question of Sport.
7.20 The Rockford Files.
8.10 Panorama.
9.00 News.
9.25 King.
10.35 Tonight.
11.15 Weather/Regional News.

All Regions as BBC 1 except at the following times:

Scotland—5.55-6.20 pm Reporting Scotland. 11.35 News and Weather for Scotland.

Wales—1.45-2.00 pm Pila Pala. 5.55-6.20 Wales Today. 6.50-7.20 Heddiw. 11.35 News and Weather for Wales.

Northern Ireland—3.53-3.55 pm Northern Ireland News. 5.55-6.20 Scene Around Six. 6.20-6.50 Hello Sunshine. 11.35 News and Weather for Northern Ireland.

England—5.55-6.20 Look East (Norwich); Look North (Leeds, Manchester, Newcastle); Midlands Today (Birmingham); Points West (Bristol); South Today (Southampton); Spotlight South West (Plymouth).

BBC 2

6.40-7.55 am Open University.
11.00 Play School.
4.50 Open University.
6.55 Horseback.
7.20 Mid-Evening News including sub-titles.
7.30 The Joys of Opera.
8.10 Lennie and Jerry.
9.00 Rhoda.
9.25 Horizon.
10.15 Arena.
10.55 The Light of Experience.
11.10 Late News.
11.25 Closedown, reading.

LONDON

9.30 am Noddy. 9.40 Sinbad Junior Cartoon. 9.45 "Swanee River" starring Don Ameche and Al Jolson. 11.10 Survival. 11.35 England, Their England. 12.00 Chorlton and The Wheelies. 12.10 pm Rainbow. 12.30 The Cedar Tree. 1.00 News. 1.20 Thames News. 1.30 About Britain. 2.00 After Noon Plus. 3.20 This Year Next Year. 4.20 Clapperboard. 4.45 Horse in the House. 5.15 Emmerdale Farm.

5.45 News.
6.00 Thames at 6.
6.35 Crossroads.
7.00 The Kenny Everett Video Show.
7.30 Coronation Street.
8.00 Chalk and Cheese.
8.30 World in Action.
9.00 Danger UXB.
10.00 News.
10.30 Political Tri-Party Discussion.
10.45 The Eamonn Andrews Show.
11.45 Barnaby Jones.
12.40 am Close: Peter Penry-Jones reads the Easter story with a painting by Tintoretto.

All IBA Regions as London except at the following times:

ANGLIA

9.35 am Betty Boop Cartoon. 9.50 The Fire and the Snow. 10.45 Face to Faith. 11.10 Country Comes West. 11.35 Walking Westward. 1.25 pm Anglia News. 2.00 Houseparty. †2.25 Monday Film Matinee: "The Magic Bow." 5.15 University Challenge. 6.00 About Anglia. 10.45 Monday Feature Film: "Ghenkis Khan" starring Stephen Boyd. 1.00 am Reflection.

ATV

9.35 am Something Different. 9.50 Gardening Today. 10.15 The Nature of Things. 11.10 The Mackenzie Affair. 1.20 pm ATV Newsdesk. 5.15 Give Us A Clue. 6.00 ATV Today. 10.45 Left, Right and Centre. 11.15 For Better, For Worse. 11.45 Barnaby Jones.

BORDER

9.30 am Solo One. 9.50 A Diary of Civilisations. 10.45 Face to Faith. 11.10 Country Comes West. †1.20 pm Border News. 2.00 Houseparty. 2.25 Matinee: "Pretty Baby." 5.15 University Challenge. 6.00 Lookaround Monday. 6.20 The Sound of . . . Diane Kirkwood. 10.45 Late Film: "Blood Kin" starring Lynn Redgrave. 12.40 am Border News Summary.

CHANNEL

1.18 pm Channel Lunchtime News and What's On Where. 2.25 Monday Matinee: "Carnival of Thieves." 5.15 University Challenge. 6.00 Channel News. 6.10 Cartoontime. 10.28 Channel Late News. 10.32 Lucan. 11.50 News and weather in French followed by Channel Gazette.

GRAMPIAN

9.45 am First Thing. 9.50 Tarzan. 10.45 Face to Faith. 11.10 Country Comes West. 11.35 Walking Westward. 1.20 pm Grampian News Headlines. 5.15 University Challenge. 6.00 Grampian Today. 6.05 The Electric Theatre Show. 10.45 Reflections 10.50 The Monday Thriller: "Puppet on a Chain." 12.35 am Grampian Late Night Headlines.

GRANADA

9.30 am Sesame Street 10.25 Survival. 10.50 Elephant Boy. 11.15 Picture Box. 11.30 The Beatles. 11.45 A Handful of Songs 1.20 pm Dodo. 2.25 Monday Matinee: "Three For The Road." 3.50 Wait Till Your Father Gets Home. 5.10 The Undersea Adventures of Captain Nemo 5.15 Crossroads. 6.00 Granada Reports. 6.30 Happy Days. 10.45 Reports Politics. 11.15 Appointment With Fear: Edward Woodward and Britt Ekland in "The Wicker Man."

HTV

9.50 am Stars on Ice. 10.20 George Hamilton IV. 10.45 Face to Faith. 11.10 Country Comes West. 11.35 Walking Westward. 1.20 pm Report West Headlines. 1.25 Report Wales Headlines. 5.15 The Undersea Adventures of Captain Nemo. 5.20 Crossroads. 6.00 Report West. 6.22 Report Wales. 10.50 The Monday Film: "The Loved One."

HTV Cymru/Wales—As HTV General Service except: 1.20-1.25 pm Penawdau Newyddion y Dydd. 2.00 Hamdden. 2.25-3.20 After Noon Plus (as HTV General Service 2.00 pm). 6.00-6.22 Y Dydd. 8.30-9.00 Yr Wythnos.

HTV West—As HTV General Service except: 1.20-1.30 pm Report West Headlines 6.22-7.00 Report West.

SCOTTISH

9.30 am Utrillo—A Painter of Paris. 9.50 Diary of Civilisation. 10.45 Face to Faith. 11.10 Country Comes West. 11.35 Walking Westward. 1.25 pm News and road report. 2.25 Monday Matinee: "Caprice" starring Doris Day. 5.15 Popeye. 5.20 Crossroads. 6.00 Scotland Today. 6.20 Crimedesk. 6.30 Wilkie in Winter. 10.45 Home and School. 11.15 Late Call. 11.20 The Detectives: McMillan.

SOUTHERN

9.30 am Stationary Ark. 9.55 Little House on the Prairie. †10.45 "The Golden Age of Comedy" starring Laurel and Hardy. 1.20 pm Southern News. 2.00 Houseparty. 2.25 Monday Matinee: "Three Coins in a Fountain" starring Dorothy McGuire. 5.15 Betty Boop. 5.20 Crossroads. 6.00 Day by Day. 10.30 Southern News Extra. 10.50 Music in Camera. 11.20 Fireside Theatre. 12.15 am Farm Progress.

TYNE TEES

9.25 am The Good Word followed by North East News Headlines. 9.30 George Hamilton IV. 9.55 The Nature of Things. 10.45 Face to Faith. 11.10 Country Comes West. 11.35 Walking Westward. 1.20 pm North East News and Lookaround. 2.25 Monday Matinee: "A Tree Grows in Brooklyn." 3.50 Little Vic. 5.15 University Challenge. 6.00 Northern Life. 11.45 Cash and Company. 12.45 am Epilogue.

ULSTER

10.45 am Face to Faith. 11.10 Country Comes West. 11.35 Walking Westward. 1.20 pm Lunchtime. 2.25 Keep Up With Yoga. 2.55 The Friends of Man. 4.18 Ulster News Headlines. 5.15 Cartoon Time. 5.20 Crossroads. 6.00 Good Evening Ulster. 10.45 Compass. 11.15 Richie Brookleman. 12.10 am Bedtime.

WESTWARD

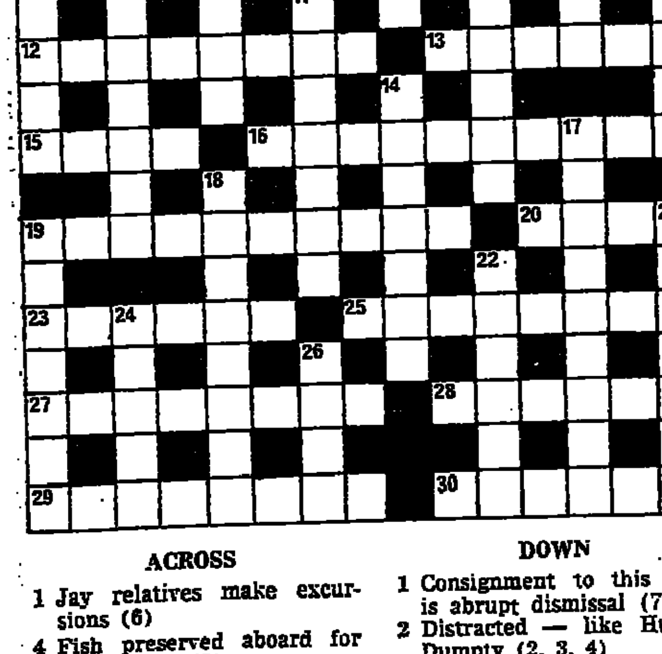
9.30 am Friends of Man. 9.55 Master of the World. 10.45 Face to Faith. 11.10 Country Comes West. 11.35 Walking Westward. 12.27 pm Gus Honeybun's Birthdays. 1.20 Westward News Headlines. 2.25 The Monday Matinee: "Carnival Of Thieves." 5.15 University Challenge. 6.00 Westward Diary and Sports Desk. 10.32 Westward Late News. †10.50 Feature Film: "Lady Hamilton" starring Laurence Olivier and Vivien Leigh. 1.00 am Faith for Life. 1.05 West Country weather, shipping forecast.

YORKSHIRE

9.30 am Untamed Frontiers. 10.00 The Wotsit from Whizzbang. 10.10 Tree Top Tales. 10.25 Ivanhoe. 11.10 Children in 1944. 11.35 Beachcombers. 1.20 pm Calendar News. 2.25 Monday Matinee: "Caprice" starring Doris Day and Richard Harris. 4.15 Cartoon Time. 5.15 University Challenge. 6.00 Calendar (Emley Moor and Belmont editions). 10.45 Jigsaw John.

RADIO 1

F.T. CROSSWORD PUZZLE No. 3,937



ACROSS

1 Jay relatives make excursions (6)
4 Fish preserved aboard for the masters (8)
9 The knock is a blow to the deserter (5-5)
10 A short one may announce a long one (6)
12 Something from the couturier can be out of this world (8)
13 One includes a coin for each person (6)
15 A figure well-known to cricketers (4)
16 Fluffy governor fights the poachers (4, 6)
19 Slipped under canvas with evil designs (4, 6)
20 "I —— on in numbers, for the numbers came (Pope) (4)
23 Have reference to deceased engineer (6)
25 Mark manuscripts with words of opposite meanings (8)
27 What Hyde was to Jekyll (5, 5)
28 Coin uttered by oriental group in Pennsylvania (6)
29 Worked for a period in chosen surroundings (8)
30 Impudent that is for a native labourer (6)

DOWN

1 Consignment to this place is abrupt dismissal (7)
2 Distracted — like Humpty Dumpty (2, 3, 4)
3 Characteristics shown by artist among the birds (6)
5 Maintain a stronghold (4)
6 His wife had her eye on Joseph (8)
7 His selection is at a premium (5)
8 Illicit liquor-store puts waitress in the money (7)
11 Commander hurried to the dance (7)
14 As March comes in the Constellation takes on a number (7)
17 She was assured she would look nice on a tandem (5, 4)
18 It takes a climber to know the tune (8)
19 A scrap in a Portuguese airport causes a mix-up (7)
21 Frank Levy upsets the Gestapo (7)
22 Jacket for the dance (6)
24 The French and the English join in a machine (5)
26 A bad-tempered person therefore must get up (4)

The solution of last Saturday's prize puzzle will be published with names of winners next Saturday.

RADIO 1

(S) Stereophonic broadcast
‡Medium Wave

5.00 am As Radio 2. 6.00 Dave Lee Travis. 9.00 Simon Bates. 11.31 Paul Burnett. 2.00 pm Tony Blackburn. 4.31 Kid Jensen. 7.00 Stayin' Alive. 8.00 Andy Peebles. 9.50 Newsbeat. 10.00 John Peel (S). 12.00-5.00 am: As Radio 2.

RADIO 2

5.00 am News Summary. 5.02 Tony Brandon (S). 7.32 Ray Moore including 8.27 Racing Bulletin and 8.45 Pause for Thought (S). 10.03 Jimmy Young (S). 12.15 pm Waggoners' Walk. 12.30 Pete Murray's Open House (S). 2.30 David Hamilton (S). 4.30 Waggoners' Walk. 4.45 Sports Desk. 4.47 John Dunn (S). 6.45 Sports Desk. 7.02 Music from the Movies (S). 7.30 Alan Dell including 7.30 The Dance Band Days and 8.02 The Big Band Sound (S). 9.02 Humphrey Lyttelton with The Best of Jazz on records (S). 9.55 Sports Desk. 10.02 The Monday Movie Quiz. 10.30 Star Sound. 11.02 Brian Matthew with Round Midnight including 12.00 news. 2.02-5.00 am You and the Night and the Music (S).

RADIO 3

‡6.55 am Weather. 7.00 News. 7.02 Overture (S). 8.00 News. 8.05 Morning Concert (S) 9.00 News. 9.05 This Week's Composer: Falla (S). 10.00 Talking About Music (S) 10.30 Vaughan Williams and Schumann concert (S) 11.00 Paul Crossley piano recital (S). 11.30 Midday Concert, part 1: Mendelssohn (S). 12.00 In Short (talk). 12.10 pm Midday Concert, part 2: Sibelius (S). 1.00 News. 1.05 BBC Lunchtime Concert (S). 2.05 Music for Organ (S). 2.40 Matinee Musicale (S). 3.40 New Records (S). 4.55 Bandstand (S). 5.25 Homeward Bound (S). ‡5.45 News. ‡5.50 Homeward Bound. ‡6.15 At Home: Richter at Aldeburgh plays Mozart, Tchaikovsky, Rachmaninov. 7.10 EBU Concert from Vienna, part 1: Halffter, Scriabin (S). 8.15 On Producing plays in Russia (interview with Peter James) 8.35 EBU Concert, part 2. Rimsky-Korsakov (S). 9.10 Sound in Mind (S). 10.00 Brahms, Mozart, Schumann piano recital (S). 11.05 Suk: Violin and piano recital on record (S). 11.25 Jazz in Britain: Trevor Watts' Amalgam (S). 11.55-12.00 News.

VHF Only—6.00-7.00 am and 5.45-7.10 pm Open University.

RADIO 4

6.00 am News Briefing. 6.10 Farming Week. 6.25 Shipping forecast. 6.30 Today including 6.45 Prayer for the Day. 7.00, 8.00 Today's News. 7.30, 8.30 News headlines. 7.45 Thought for the Day. 8.35 The Week on 4. 8.45 James Cameron with the BBC Sound Archives. 9.00 News. 9.05 Start the Week with Richard Baker. 10.00 News. 10.05 Wildlife. 10.30 Daily Service. 10.45 Morning Story. 11.00 Round the World in a Bustle. 11.45 Listen with Mother. 12.00 News. 12.02 pm You and Yours. 12.27 Brain of Britain 1979 (S). 12.55 Weather: programme news. 1.00 The World at One 1.40 The Archers. 1.55 Shipping forecast. 2.00 News. 2.02 Woman's Hour 3.00 News. 3.05 Afternoon Theatre (S). 4.35 Story Time. 5.00 PM: News magazine. 5.50 Shipping forecast. 5.55 Weather; programme news. 6.00 News including Financial Report. 6.30 The Burkiss Way (S). 7.00 News. 7.05 The Archers 7.20 From Our Own Correspondent. 7.45 "The Dybbuk," play by S. Ansky (S). 9.15 Musical Journeys in Indonesia. 9.30 Kaleidoscope. 9.59 Weather. 10.00 The World Tonight. 10.30 Perspective. 11.00 A Book at Bedtime. 11.15 The Financial World Tonight. 11.30 Today in Parliament. 12.00 News.

BBC Radio London

5.00 am As Radio 2. 6.30 Rush Hour. 9.00 London Live. 12.03 pm Call In. 2.03 206 Showcase. 4.03 Home Run. 6.10 Look, Stop, Listen. 7.30 Black Londoners. 8.30 Breakthrough. 10.03 Late Night London. 12.00 As Radio 2. 12.05 am Question Time from the House of Commons. From 1.05—Join Radio 2

London Broadcasting

5.0 am Morning Music. 6.00 The AM Show. 10.00 Brian Hayes. 1.00-8 pm LBC Reports with George Gale at 3 pm. 8.00 After Eight. 9.00 Nightline. 1.00 am Night Extra.

Capital Radio

6.00 am Graham Dene's Breakfast Show (S). 9.00 Michael Aspel (S). 12.00 Dave Cash (S). 3.00 pm Roger Scott (S) 7.00 London Today (S). 7.30 Adrian Love's Open Line (S). 9.00 Your Mother Wouldn't Like It (S) 11.00 Tony Myatt's Late Show 2.00 am Peter Young's Night Flight (S).

THE ARTS

CAMDEN FESTIVAL

Round House

Don Quixote by RONALD CRICHTON

Paisiello's *Don Chisciotte*, a Neapolitan opera buffa of 1769 was re-worked over two centuries later by Hans Werner Henze for the summer festival at Montepulciano. The public square of a Tuscan hill-town is a more sympathetic place than the Round House and there the up-dating may have worked. In Phoenix Opera's staging for the Camden Festival last week—the first "opera in the round" it seems in these islands, and Lord! what prospects that calls up—the joke turns heavy and goes on for too long. That is a pity, for the music, or what one hears of it through the galumphing, is attractive.

Paisiello turned out opera like ice-cream, but he was a good confectioner, not to be despised—his *Barber of Seville* can still be heard with pleasure in spite of Rossini. Henze seems to have worked on his original fairly freely, re-composing it for a chamber ensemble for the main intrigue and an amateur wind-and-brass band for Quixote's major flights of fancy. The Koeing ensemble, at the Round House at least, is poked away in holes in Ralph Koltai's otherwise ingenious set, the big band (from William Ellis School) is up in the balcony. The contrast is effective and the dove-tailing neatly done by the two conductors, Jan Latham-Koenig (down) and Richard Hickman (up).

The small ensemble includes instruments Paisiello never knew. With their aid Henze has contrived some entertaining accompaniments, though one or two of the percussion effects come round too often. Because the producer Tom Hawkes has chosen a knockabout, jokey style with bawdy oaths uttered in the wincing way English opera singers use when they are trying to act like real comics, one has the uncomfortable feeling of missing good things from the half-submerged downstairs orchestra (the balcony band has it easier).

Judging from the amount of ill-tuned singing, some of the performers also found it difficult to hear the small orchestra. Exceptions were the ever-reliable Kenneth Bowen as Quixote, Alan Opie as Sancho Panza, Kate Flowers as Carmosina and, when she was allowed to stand still and sing, Alison Hargan as the Countess. Sancho and Carmosina had the two most tuneful numbers—for her a six-eight solo in the first part, for them both a pretty duet towards the end of the opera. The story deals with the efforts of some up-country gentry to make sport of Quixote (in fact they spend more time on their own uninteresting love-affairs) and the knight's ability to rise serenely if dottily above them and their pranks. It hardly needed a theatre musician of Henze's calibre to make the point.

Kenneth Bowen (left) — Leonard Burt

Logan Hall

Janet Baker by ELIZABETH FORBES

The Camden Festival drew to a triumphant close on Saturday night with a recital given by Janet Baker and Geoffrey Parsons at the Logan Hall. Rarely can artistry and dedication have been presented in such pure, intense form. Many singers treat an opening group of *arie antiche* merely as a means of warming up their own voices or of settling the audience's attention. Not so Dame Janet, who lavished all her interpretative skill on each and every item in the programme and from the first note of the first song—Caldara's "Selve amiche"—held her listeners in the vice-like grip of her own concentration. Martini's tenderly regretful "Plaisir d'amour" established a mood of sorrowful love that Pergolesi's "Ogni pena" further explored.

In the next group it was a particular pleasure to hear several Lieder by Mendelssohn sung without a trace of condescension. The piano playing of Geoffrey Parsons contributed greatly to the enjoyment of these accomplished if scarcely intellectual settings. The elfin charm of the accompaniment to "Neue Liebe" brilliantly evoked Heine's poem while in the familiar and well-loved "Auf Flügeln des Gesanges"—also a setting of Heine—singer and pianist together achieved a simplicity and directness of utterance entirely free from false naivety. In "Nachtlied" Dame Janet's exquisitely fine-spun line had the strength as well as the delicacy of silk. The more robust humours of "Hexenlied" were expressed in appropriately full, resonant tone.

The second half of the programme began with "Poème d'un Jour," Fauré's setting of verses by Charles Grandmougin. In "Recontre" Dame Janet had not wholly regained the total absorption that characterises her singing, but "Toujours" and "Adieu," the second and third songs in this miniature cycle, caught to perfection the elusive, bitter-sweet flavour of a love affair over almost before it has begun. Debussy's "Mandoline" displayed the splendid articulation, both vocal and pianistic, of this rewarding partnership. With Lia's Air from the same composer's cantata *L'Enfant prodigue*, the feeling of passionate agony in the repeated cries of "Azaël! Why did you leave me?" contrasted effectively with the gentler emotions of Mendelssohn and Fauré.

Three songs by Delius included the beautiful "Twilight Fancies," whose legendary spirit was echoed and intensified by the last song in the recital, Stanford's setting of "La bell dame sans merci." Where Delius and Björnson evoke an atmosphere of sad but harmless fantasy, Stanford and Keats attain a frightening and sinister magic that was powerfully conveyed by the singer. Finally, to demonstrate her versatility, Dame Janet gave two encores in styles quite different from the poetic tone of her main programme: Mozart's "Alleluia" served to show off her technique; humour crept into the hitherto serious proceedings with "I just love my voice," a sentiment whole-heartedly shared by the enthusiastic, capacity audience.

Fenton House

Joseph Payne

This somewhat surreal recital was entirely devoted to contemporary American harpsichord music and was given by a player who has won some favourable comments for his recordings of Bach's French Suites, now released in this country.

On this occasion Mr. Payne seemed ill-at-ease, as well he might. His six pieces, representative of a lively interest which American composers have shown in the bright, percussively-plucked possibilities of the harpsichord, were all surely designed for a sophisticated reproduction instrument complete with foot pedals, automatic gear change and overdrive (as irreverent practitioners are wont to call these helpful modern aids).

But at Fenton House Mr. Payne was faced with a lumbering 1770 Shudi-Broadwood—possessing, it is true, two manuals and plenty of stop changes, but very hard to manhandle and by no means exactly in tune. Indeed Payne's own semi-improvisatory *Omphalos* was marked by a long silent tussle with a recalcitrant handstop which did not increase the piece's coherence. Most substantial was Daniel Pinkham's soberly winding Partita, a serious piece of exploration. Too much else was f—music pleasantry. Norman Dello Joio's *Homage to Scarlatti* was shockingly flip, with a smoochy tune and squareness of rhythm that owed nothing to the 18th century and everything to Hollywood.

Ann McMillan's *April Episode* was a nicely astringent miniature, the world premier of Robert Stern's Fantasia on a motet by De Florentia seemed to be over before the motet had even been properly stated. But I am wary of judging these pieces in the circumstances, and I am even more wary of judging Mr. Payne from his performance on a harpsichord which became progressively more unpleasant to listen to. Surely the Camden Festival could have afforded a tuner in attendance?

NICHOLAS KENYON

New Oxford dictionary

A new dictionary has been added to the family of Oxford dictionaries. It is The Oxford Paperback Dictionary, compiled by Joyce M. Hawkins, which in just under 800 pages, at £1.75, gives information on 45,000 words and phrases. The dictionary is designed, both editorially and typographically, to be as easy to use as possible. Besides carrying the authority of an Oxford dictionary, it presents its information in a practical way. If you look up "trooper" for example, after its two meanings (British and American) you will find the phrase "swear like a trooper," and also a warning note "Do not confuse with trouper." Under "trouper," besides the definition and the phrase "a good trouper," comes a cross-reference again to "trooper"; also, in case you should be tempted to pronounce "trouper" like "trousers" or "trout," there is a clear indication of its pronunciation.

Capital Radio to encourage drama

In an attempt to encourage more drama for broadcasting, Capital Radio is awarding a £750 prize to a new writer and the chance of having a play on the air. The award is being made through the Greater London Arts Association (which, at the same time, is offering a similar prize for a play for a small touring company to perform).

The awards are open to anyone over the age of 15 who lives, works or studies in Greater London.

Teatro alla Scala, Milan

Mosè and Bohème

by RONALD CRICHTON

An event of the present season at La Scala has been a revival of one of the grandest of Rossini's serious operas, *Mosè*. This is the usual title for the Italian version of his *Moïse et Pharaon* produced in Paris in 1827, a recomposition and expansion of the earlier *Mosè in Egitto* given at Naples in 1818—Rossini revised the third act the following year, adding the work's most famous number, the Prayer "Dal tuo stellato soglio." *Moïse* was his last opera but two. Only *Le Comte Ory* and *Guillaume Tell* were to follow. The Prayer apart, there are no single numbers which have become popular, yet the grandeur and mastery of this opera of choruses and ensembles has kept it in the repertory even when interest in Rossini's serious side was minimal.

The new Scala version is *Moïse* sung in Italian, revised (with one eye on the first Italian edition of the score) by Jesús López Cobos, who conducts the performances and is preparing a new critical edition of the score. Producer and designer are Luciano Damiani. The results have not provoked much enthusiasm, yet the production is not a fiasco—re-planning of the lighting and stronger all-round casting would make all the difference. In a discussion with Damiani printed in the programme López Cobos claims that the version given is "almost" complete, but admits cutting some repeats, mainly it seems for the benefit of the singers. This does not necessarily benefit Rossini, whose big structures become lop-sided.

Moses was the Russian bass Evgeny Nesterenko, the voice ever more imposing and richly coloured, dignified in his slow movements yet never fully commanding the stage until the Prayer in the last scene. The Pharaoh of Simon Estes, though seated on a throne for much of the action, had more character. His lighter, more incisive singing, told well against the other. Of the ladies only Julia Hamari as Pharaoh's wife Sinaide made much effect—her scene in Act 2 (the first two acts were done without a break, and very long they seemed) was brilliant not only for the relish and confidence with which Miss Hamari sang Sinaide's music but because during this scene she was brightly lit.

The production as a whole was a curious demonstration of how in the opera house ear and eye interact. *Mosè* is much concerned with darkness, most of it summoned up by the protagonist. But stage darkness can be simulated without creating confusion—it doesn't need follow-spots to make the singers' features clear enough to be recognisable. I am still not absolutely certain that I correctly identified Elisero—the name given in the libretto to the brother of Moses—though one tenor voice presumably belonging to Giampaolo Corradi was lighter and more agile than the sound made by Vincenzo Bello, who sang the heavier (and very demanding) first tenor part of Pharaoh's son Aménophis, whose love for the Jewish girl Anaide complicates the efforts of Moses to lead the Jews out of Egyptian captivity.

This fundamental miscalculation was the stranger for Damiani's professed intention to make *Mosè* more drama than oratorio (Rossini's description of the original was *azione tragico-sacra*) but what came out was precisely an oratorio, seen moreover by emergency lighting. This was a pity because Damiani is a designer of great talent. Though his use of a billowing white canopy-cloth above the acting area to symbolise the various plagues became monotonous, his sand-dune sets, splendid but not gaudy costumes and elaborate attributes (banners, thrones, canopies) for Pharaoh and his court gave pleasure when they could be seen. The crossing of the Red Sea was effectively managed with more billowing cloths, this time lower down.

The obscurity on stage no doubt added to the audience's irritation. The upper reaches of the house objected to the ballets (there was a clumsy device of blackouts to get the chorus off and on again) though they were competently done in choreography by Geoffrey Cauley. The gallery also gave the bird to poor Aménophis, gamely as he wrested with his difficult part. But they applauded the Anaide of Maria Barazzini for her strong top notes, overlooking some ill-tuned smudging lower down. Luigi Roni sang the priest Osiride, completing the Egyptian team, vocally at least stronger than their adversaries.

The orchestral playing under López Cobos was clear, well-ordered and generally distinguished yet short of majesty for things like the big, brass accompanied recitative of Moses, "Eterno! immenso! incomprensibil Dio!" Considering the limitations of some of the singers the big ensembles went pretty well, notably "Mi manca la voce" (full of Verdian premonitions) in Act 3 and the superb G minor introduction to the previous act with the snaky theme winding its way through key after key. The Prayer in its cunning simplicity made the usual rousing effect.

★

The previous evening brought a chance of seeing the famous Zeffirelli production of *La Bohème* (only five years younger than the equally historic Visconti *Don Carlos* at Covent Garden), with Kleiber conducting and a cast difficult to better today. The staging has worn well, though in the second-act set—full height Parisian house-fronts with a split-level street below, crowds on a terrace and the Café Momus on a lower level still—it is not easy to reconcile the slow motion of the crowd with the pace of the music. The third act, with the barrier seen in sharp perspective, disappearing behind a slight rise in the snowy ground, is excellent.

The pathetic, appealing quality of Ileana Cotrubas as Mimi could be foreseen, not however the full poignancy of her last act, where the fading yet beautifully poised line was so perfectly matched by the conductor's gift for intensity in extremely soft playing. Can there have been a better Musetta than Lucia Popp since Welitsch? The middle voice is now as beautiful as the top. Pavarotti's big bear of a Rodolfo is the ideal complement to the Mimi of Cotrubas. The sympathetic quality of Cappuccilli's Marcello was a surprise—he isn't often allowed a comic role. Nesterenko made a haunting Russian romance out of Colline's solo. Kleiber's extremely but not intolerably elastic conducting produced as brilliantly expressive playing by the Scala orchestra as an unforgettable *Butterfly* under de Sabata many years back.

Two singers win Miriam Licette award

The £1,500 Miriam Licette singing scholarship has been awarded, for the first time, to two singers, the Arts Council has announced. They are Anna Marie Holroyd, 23, of Headington, Oxfordshire, and Mary King, 26, of West Hampstead, London.

The scholarship is awarded annually to female singers under the age of 30 for advanced study in Paris.

Royal Court

Cloud Nine

by B. A. YOUNG

"You write so well, and have so much learning," Richard Strauss said to Hindemith, "that I wonder you do not write music." I feel a similar emotion about Caryl Churchill. *Cloud Nine* is full of good lines and effective little situations; but at the end of it I felt we had seen nothing more than an enjoyable exhibition of the splendid acting of the Joint Stock Theatre Group.

The play is in two distinct halves. The first employs all the current disparaging ideas about the Colonial era. It is as ill-informed as it is ill-natured, but neither characteristic matters much, since it takes the form of a cartoon in which historical accuracy is not essential. Clive, played by Antony Sher, is a Colonial archetype, and Betty (Jim Hooper) his archetypal wife. Their small son Edward (Julie Covington) is different, however; he plays with dolls and has dirty secret games with Harry Bagley, the great, but gay, explorer (William Hoyland).

Establishing this pattern appears to be all that the first act aims to do. The second act, set in our own time, also confines itself to setting a pattern, but it is a very different one. Edward, now played by Jim Hooper, lives with another man of dubious fidelity. His sister Victoria (Miriam Margolyes), who was only a doll in Act 1, is now married, but is thinking of leaving her husband to go and work in Manchester. She also leans towards a lesbian relationship with Lin (Carole Hayman), a single parent with a tiresome daughter Cathy (Antony Sher), who vies with her in foulness of mouth.

But here it is all over again; nothing but actual or potential switching of partners, the sexual preferences being casual in the extreme. Should we learn something from the comparison of the two worlds? I learnt nothing, I'm afraid. That the Joint Stock Company is talented and versatile I knew already, and that Max Stafford-Clark is a director of elegant talent. If the aim is to show, as the theme song suggests, that any kind of sexual union may be blissful, this is old news by now, and was indeed demonstrated rather more clearly in the simple unsophistication of Rony Robinson's piece at the Theatre Royal, Stratford, yesterday.

If this was not the aim, I am sorry to have missed something that I have no doubt I should have been wiser for knowing. Meanwhile, I can at least report that the playing of the company, transexual or otherwise, is matchlessly good.

Julie Covington and Jim Hooper — Leonard Burt

BUILDING SOCIETY RATES

	Deposit rate %	Share accounts %	Sub'pn shares %		*Term Shares
Abbey National	7.75	8.00	9.25	9.50	4 yrs., 9.00 3 yrs., 8.50 2 yrs.
Aid to Thrift	8.25	8.75	—	—	
Alliance	7.75	8.00	9.25	9.50	4 yrs., 9.00 3 yrs., 8.50 2 yrs.
Anglia Hastings and Thanet	7.75	8.00	9.25	9.50	4 yrs., 9.00 3 yrs., 8.50 2 yrs.
Bradford and Bingley	7.75	8.00	9.25	9.50	4 yrs., 9.00 3 yrs., 8.50 2 yrs.
Bridgwater	7.75	8.00	9.50	9.50	4 yrs., 9.10 2½ yrs., 8.75 2 yrs.
Bristol and West	7.75	8.00	9.25	—	
Bristol Economic	7.75	8.00	9.25	8.25	3 months notice
Britannia	7.75	8.00	9.25	9.50	4 yrs., 9.00 3 yrs., 8.50 2 yrs.
Burnley	7.75	8.00	9.25	9.50	4 yrs., 9.00 3 yrs., 8.50 2 yrs.
Cardiff	7.75	8.50	9.50	—	
Catholic	7.50	•8.20	9.00	—	• 8.40 over £5,000
Chelsea	7.75	8.00	9.25	8.75	6 mths. not. £500 min. 8.50 3 mth.
Cheltenham and Gloucester	7.75	8.00	9.25	9.50	4 yrs., 9.00 3 yrs., 8.50 2 yrs.
Citizens Regency	7.75	8.30	9.50	9.55	4 yrs., 9.30 3 yrs., 9.05 2 yrs.
City of London	8.00	8.30	9.25	9.35	3 yrs. increment share min. £500
Coventry Economic	7.75	8.00	9.25	9.00	3 yrs. min., 8.50 3 mths. notice
Coventry Provident	7.75	8.00	10.00	9.50	4 yrs., 9.25 3 yrs., 8.75 2 yrs.
Derbyshire	7.75	8.00	9.25	8.50	up to 3 months' notice
Ealing and Acton	7.75	8.50	—	9.15	2 yrs., £2,000 minimum sum
Gateway	7.75	8.00	9.25	9.50	4 yrs., 9.00 3 yrs., 8.50 2 yrs.
Greenwich	6.45	8.10	9.25	9.60	4 yrs., 9.10 3 yrs., 8.25 2 yrs.
Guardian	7.75	8.25	8.50	9.00	£1,000 3 months' notice
Halifax	7.75	8.00	9.25	9.50	4 yrs., 9.00 3 yrs., 8.50 2 yrs.
Heart of England	7.75	8.00	9.25	9.00	3 yrs., 8.50 3 months' notice
Hearts of Oak and Enfield	7.75	8.25	9.75	9.25	3-4 yrs., 9.00 2 yrs., 8.71 1 yr.
Hendon	8.00	8.50	—	9.00	6 months, minimum £2,000
Huddersfield and Bradford	7.75	8.00	9.25	9.50	4 yrs., 9.00 3 yrs., 8.50 2 mths.
Lambeth	7.75	8.30	9.75	9.00	3 months' notice, £250-£5,000
Leamington Spa	7.85	8.10	■10.97	8.85	2 years. ■ 3 years
Leeds Permanent	7.75	8.00	9.25	9.50	4 yrs., 9.00 3 yrs., 8.50 2 yrs.
Leicester	7.75	8.00	9.25	9.50	4 yrs., 9.00 3 yrs., 8.25 3 mths.
Liverpool	7.75	8.00	9.45	9.10	3 yrs., 8.60 2 yrs., min. £1,000
London Goldhawk	7.75	†8.50	†9.75	†9.25	2 yrs., †9.00 1 yr.
Melton Mowbray	7.85	8.10	9.25	8.85	2 yrs., minimum £2,000
Mornington	8.25	8.75	—	—	
National Counties	8.00	8.30	9.30	9.40	6 mths., 8.75 3 mths., min. £1,000
Nationwide	7.75	8.00	9.25	9.50	4 yrs., 9.00 3 yrs., 8.50 2 yrs.
Newcastle Permanent	7.75	8.00	9.30	9.50	4 yrs., 9.30 3 yrs., 9.00 2 yrs.
New Cross	8.50	8.75	—	—	
Northern Rock	7.75	8.00	9.25	9.50	4 yrs., 9.00 3 yrs., 8.50 2 yrs.
Norwich	7.75	8.00	9.50	9.00	3 yrs., 8.75 2 yrs., min. £500
Paddington	7.40	8.40	10.00	9.00	3 mths., 9.25 6 mths., min. £1,000
Peckham Mutual	8.00	8.50	—	—	
Portman	7.75	8.00	9.25	9.00	3 yrs., 8.75 ½-yrly., 8.25 3 mths.
Principality	7.75	8.00	9.25	9.50	4 yrs., 9.00 3 yrs., 8.50 2 yrs.
Progressive	8.00	8.25	9.25	9.50	4 yrs., 9.00 2 yrs., 8.75 3 months
Property Owners	7.75	8.50	9.75	9.00	3 months' notice
Provincial	7.75	8.00	9.25	9.50	4 yrs., 9.00 3 yrs., 8.50 2 yrs.
Skipton	7.75	8.00	9.25	9.50	4 yrs., 9.00 3 yrs., 8.50 2 yrs.
Sussex Mutual	7.75	8.35	10.00	9.30	3 yrs., 9.00 2 yrs., 8.75 1 yr.
Town and Country	7.75	8.00	10.00	9.50	4 yrs., 9.00 3 yrs., 8.50 2 yrs.
Walthamstow	7.75	8.10	9.20	9.60	4 yrs., 8.85 3 mths. not. min. £500
Woolwich	7.75	8.00	9.25	9.50	4 yrs., 9.00 3 yrs., 8.50 2 yrs.

* Rates normally variable in line with changes in ordinary share rates.
† Includes 0.25% Centenary Bonus throughout 1979.
All these rates are after basic rate tax liability has been settled on behalf of the investor.

FOOTBALL BY TREVOR BAILEY

Arsenal to Wembley with win over Wolves

ARSENAL BEAT a sadly inept Wolverhampton Wanderers by 2—0 to reach Wembley for the second time in succession.

In last year's semi-final they outclassed Orient, who looked an indifferent Second Division team and played like one, while on this occasion it was easy to understand why Wolves are still in the relegation zone.

The Midlanders can consider themselves fortunate that there are so many indifferent First Division teams, because in a vintage season they would surely go down.

The first 45 minutes were drab and seemed to last twice as long, containing those ingredients responsible for so many indifferent semi-finals.

The fear of defeat dominated everything else, with two four-man midfield formations more concerned with providing additional cover for their respective rearguards than support for the two-man forward lines.

It was full of frantic running, hasty distribution and mistakes. The main attacking ploy was the high punt upfield and the most popular pass was back to the goalkeeper.

Even in that painful period the Gunners provided 80 per cent of the football and 90 per cent of the ideas, so that it came as no surprise when they took control after the interval.

Stapleton, whose skill, courage and effort proved a constant source of embarrassment for a suspect back four, deservedly gave his side the lead with a spectacular shot. Later his partner upfront, Sunderland, pounced on a defensive error to shoot under the advancing 'keeper.

The Gunners now have the opportunity to make amends, not for losing the final against Ipswich, but for the way they lost it.

Can they do it, even though their new opponents, either Liverpool or Manchester United, will provide more formidable opposition?

The answer is an unqualified yes. The present Arsenal, although it may be little better as a footballing combination than the one that froze at Wembley, does possess more character and experience.

These two virtues count for much on the big occasion. It enabled them to pull out that little extra when things were not quite clicking in the first half.

It also allowed them at Villa Park to overcome the considerable handicap of being without their world-class international and main inspiration Liam Brady. The outstanding sides are not those who win when playing well, but those who still win when not at their best.

There are other omens in Arsenal's favour. Losing FA finalists who return in the following year have a good record of success.

Since the war Manchester United, Manchester City and Charlton Athletic have all triumphed at their second attempt.

Favourites also have had an unhappy record at Wembley in recent years, falling, indeed, on the last three occasions. This time the Gunners are unlikely to be the fancied side.

The biggest threat to Arsenal's capturing the Cup could well be their lack of high-quality cover. Although young Gatting performed admirably within his limitations and looks a fine prospect for the future, he is not yet the class First Division half-back he should become.

Messrs. Neill and Howe have to try to see their players avoid injury, but at the same time they cannot afford to have them hold back in League matches.

This could so easily bring about a losing sequence and undermine the existing high morale, especially as Liverpool will continue to churn out the right results, Manchester United seem to have struck their best form, and both have exceptional back-up squads.

The Barnwell and Barker combination which took control at Molineux in November, when the club appeared to be inexorably heading down into the Second Division, have done a splendid rescue job with limited playing resources.

Their tactical policy has been deliberately and inevitably frugal, with the emphasis on exploiting mistakes by the opposition and not giving the ball away themselves, rather than creation; bread-and-butter football, with little butter and no jam.

If his team avoids relegation, then John Barnwell can rightly claim that his rather dull methods have been fully justified.

In his brief, lucid and admirably fair summing-up to the Press after the match, John showed that he recognised the need to rebuild next season.

His present team may have been good enough to reach the semi-final, though it must be mentioned that they never encountered First Division opposition on the way, but it was all too obvious on Saturday that they simply did not possess the class required to win honours in England and Europe.

It will probably take the Barnwell-Barker partnership two, perhaps three years to bring real glory back to Wolverhampton, but this pair have the ability and the determination to succeed.

It is to be hoped that the Midland supporters, who are inclined to be impatient, do not expect an overnight miracle.

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Monday April 2 1979

Security is not enough

IT WOULD be impossible to prove, and it is in any case not very likely, that the present outbreak of attacks by the Provisional IRA and other related bodies would have been less vicious if British policy towards Ireland over the past year or so had been different. Acts such as the assassination of Mr. Airey Neave and the British Ambassador to The Hague, Sir Richard Sykes, appear to be those of people who are pursuing violence for its own sake and who are not open to any kind of political argument. They are to be utterly condemned.

Warnings

At the same time, however, it would be hard to maintain that British policy recently has been a conspicuous success. Mr. Roy Mason, the Secretary of State for Northern Ireland, deserves some credit for the way he helped to improve security and even to attract some economic investment to the province. Yet it has been clear for some months that the reduction in the level of violence has gone about as far as it can possibly go under present policies. Both police and army officers had been warning that the Provisional IRA had undergone a period of reorganisation and that it was preparing to strike more efficiently and to a geographically wider range of targets than in the past. In that sense, the events of the last few weeks are not entirely surprising.

There must also be some doubts about a policy which continues to pour money into Ulster without any economic justification. The Kilroot power station, which will produce enormous excess capacity, is one example. Another is the DeLorean car plant, which simply went to the bidder who was prepared to offer the highest public subsidy.

The tightening of security as practised by Mr. Mason was desirable in itself. There might also have been something more to be said for his policy of distributing financial largesse if it had been accompanied by a political dimension. All too plainly, it was not. British policy towards Ulster, especially in the last few months, has been characterised by an apparent readiness to lean towards the Unionists at the expense of the Catholics. The Bill to increase the number of Ulster MPs at Westminster may have been justified on the grounds that the province is seriously under-represented in comparison with other parts of the UK. But it was widely seen as a device to buy Unionist support in order to keep the Government in power a little longer. It is also inexcusable that it should have contained no provision for proportional representation, despite the special Ulster circumstances. The principle of "power-sharing"—or whatever similar term one chooses to use—seems to have been dropped.

In these circumstances, it is understandable that the Catholic community in Ulster should have become more isolated and more alienated. That is not to say that there is much support for the Provisional IRA and its offshoots. Indeed it is striking that one of the most moving tributes to Mr. Neave came from Mr. Gerry Fitt, the sole representative at Westminster of the Social and Democratic Labour Party. But it is to say that there is a dangerous political vacuum in which support for the IRA could yet grow.

No government is more aware of this than that of the Irish Republic. For ultimately the IRA threat to Dublin is greater than it is to the British mainland. In Britain the violence can be almost certainly contained, though at a price, but in the Republic it is a potential threat to the very system. That is why Irish governments no longer seem to condone IRA activities. Their co-operation with the British authorities in security matters is now almost complete. There is also no longer any official demand for the withdrawal of British troops from Ulster.

Objective

Yet there remains one element in the Irish position that the British Government has recently overlooked. It is that the search for a political settlement that takes account of the Catholic community in Ulster should not be forgotten. After the killing of Mr. Neave security will again have to be tightened. But a security policy alone is not enough. There must also be a political objective. That will be a major task of the next British government to achieve whichever party it is formed—even if it means going back to Sunningdale.

A temporary price freeze

AS WAS ONLY to be expected in the run-up to the general election, Mr. John Silkin, the British Minister of Agriculture, has been claiming a good deal of credit for the outcome of last week's farm price talks in Brussels. It is not clear, however, that the result was all that much of a triumph, either for Britain or for the Community at large.

It is true that Mr. Silkin argued, with admirable persistence, in favour of the Commission's proposal that there should be a general freeze of the notional "common" prices, but it would be an illusion to suppose that his arguments have won over his opponents in other member states. If in practice there will be a price freeze for at least three months, this is not because the Nine positively agreed, but only because they remained deadlocked, and had little option but to extend the current price regime.

Doggedness

The defeat of the British Government and the imminence of the election campaign ruled out the convening of another farm ministers' Council in the near future, and the earliest date that negotiations can resume again will be the middle of May. Since no-one expected agreement to be reached at the first or even the second session of the new round, it seemed prudent to assume that current prices would have to remain in force until the end of June. Mr. Silkin by his doggedness, and the government by its defeat in the House of Commons, have certainly delayed any increase in the "common" price levels. But it would be premature to assume that the principle of a price freeze has made substantial headway in the Council of Ministers.

The other side of the coin, of course, is that the deadlock over prices also included a deadlock over the Commission's proposals for new taxes on milk production. These taxes cannot now be imposed, on the best hypothesis, until September.

It is a safe bet, therefore, that the milk surplus, which is already pre-eminent among the expensive scandals of the common agricultural policy, will become even larger and more expensive this year. Last year intervention buying of surplus milk cost the Community £2.3bn, and preliminary estimates suggest this year's bill may reach £2.5bn. Few British voters will ever have heard of the Commission's milk tax proposals, and claims of a three-month price freeze may sound impressive from election platforms. But in terms of what has actually been achieved, it is not at all obvious that the bargain comes out on the plus side, either for the Community or for Britain.

The doubts are particularly acute in the case of Britain's national interest, since the cost of the surplus of milk (as of other products) falls more heavily on the British taxpayer than on his continental counterparts. As it is, Britain is already, we now learn, the biggest net contributor to the Community budget, and the bill is expected to rise, despite the fact that it is one of the poorer Community countries.

None of this should be taken as decrying the principle of a freeze on the "common" prices: on the contrary. We have long argued that the Community's farm price levels are far too high—that is why they lead to the production of unsaleable surpluses—and should be brought down. Taken in isolation, a reduction in price levels is almost certainly unattainable on political grounds, so the next best thing is a price freeze on surplus products.

Compromise

In that sense the only positive decision which did emerge from the Council—the devaluation of the British, French, Italian and Irish "green" currencies—was a tolerable compromise with reality. Farmers in these countries will get a small increase in prices (though still less than the rate of inflation), while German farmers, whose prices are already far the highest in the Community, get no increase.

The trouble with the Silkin approach is that, by its exclusive concentration on the electorally appealing slogan of a price freeze, it has prevented substantive negotiation on other less dramatic measures which could have played a useful part in curbing surpluses and reforming farm structures in Europe. Any reform of the farm policy is bound to be a slow process, and it is bound to be more complicated than Mr. Silkin's plan for a four-year price freeze. The name of the game is negotiation, not confrontation.

THE PENNSYLVANIA REACTOR ACCIDENT

A major setback to U.S. nuclear power

By David Lascelles in New York and David Buchan in Washington

AMERICA HAS gone through a tense weekend watching and waiting while engineers grappled with the country's worst nuclear accident to date—a crippled and leaking nuclear power station in Pennsylvania.

By yesterday, five days after the cooling system at the Three Mile Island plant in the Susquehanna River had failed and radioactive steam had spewed into the atmosphere, it was still not clear how the emergency would end. Pressure and temperature in the damaged reactor core were high. Nobody could get near because of escaped radiation. It will probably not be possible to approach it before tomorrow or Wednesday.

Danger likely to recede

Although the reactor was stable, the cooling process was complicated by the presence in the core of a steam and hydrogen bubble. Officials feared it could force out cooling water and expose the fuel rods or explode itself.

It appeared though that the worst catastrophe, reactor melt down—which officials of the Nuclear Regulatory Commission said earlier could not be ruled out—was unlikely and that the danger was receding as time passed.

Even if the emergency ends in the next few days, and the thousands of people who fled the area return safely to their homes, the incident is little short of a disaster for the cause of nuclear power. The case for it had just begun to regain momentum because of fuel shortages caused by the Iranian crisis. The repercussions of what happened at Three Mile Island may well spread to other countries engaged in the nuclear debate.

It is the second nuclear story to reach the headlines in two weeks. In mid-March, five atomic power stations were shut down because of faulty design. Not surprisingly, shares of nuclear companies slumped on Wall Street at the end of last week.

The accident was triggered in the early hours of last Wednesday by a faulty pump and made worse by human error when an emergency cooling system was mistakenly turned off, overheating the core for a time. Subsequently some of the water which had leaked on to the reactor floor was mistakenly piped to an auxiliary building which had no radiation filters. What was originally presented as a minor accident escalated in the next two days as complications developed with cooling, and radioactive steam escaped from the containment building.

By Friday, the Governor of Pennsylvania, advised pregnant women and young children in the immediate area to leave and people within 10 miles of the power station to close their doors and windows. Schools within a five-mile radius were closed. By Saturday, thousands more had left the neighbouring towns, leaving them ghost-like and empty and prompting the authorities to declare a curfew to prevent looting.

President Jimmy Carter issued a statement urging Pennsylvania officials to "err on the side of safety and caution" and opened up a hot line from the site to the White House. Ironically, he was cloistered away preparing a major statement on energy policy for later this week. Public reaction at all levels was swift and sharp. Dozens of anti nuclear protestors descended on the area with their banners and leaflets, and in Washington, Congressional leaders were outspoken in their criticism.

The Senate majority leader, Mr. Robert Byrd, said the accident had shattered people's faith in nuclear power. Senator Edward Kennedy wrote to Dr. James Schlesinger, the Energy Secretary (who was still valiantly defending the long-term safety record of nuclear power) that "it was more important to build these plants safely than to build them quickly." Senator Henry Jackson, Chairman of the Senate Energy Committee, perhaps the single most influential figure on energy policy and not an outright opponent of nuclear power, said the accident would hurt the nuclear programme and leave it in "semi-limbo."

Many of the statements may have been hasty responses to an atmosphere of crisis, but the fact remains that the accident could hardly have come at a more critical time for all those involved on either side in the nuclear debate, which means most of the country. The timing is also ironic given the recent release of the China Syndrome, a highly publicised film starring Miss Jane Fonda about an uncannily prescient crisis at a Californian nuclear power plant. It contains the line that a nuclear accident would render permanently uninhabitable an area "the size of Pennsylvania."

Growing energy problems

For the backers of nuclear power all of this is most unfortunate, since the accident happened just as the country's mounting energy problems might well have brought about a shift of public and congressional opinion on to their side.

There have been a few straws in the wind in recent months. The environmental lobby, long the major rallying point of nuclear opponents, has been weakened somewhat by the growing awareness that coal must be mined, refineries built, and power generated if the country is to keep going. How vulnerable the U.S. is to the vagaries of foreign oil suppliers was demonstrated by the recent shutting off of Iranian oil. In Congress, there had been moves to clear the way for more nuclear power in the form of Bills to speed up licensing and proposals to approve reactor designs on a standard rather than plant-by-plant basis.

All these shifts had yet to combine into a major pro-nuclear movement. But senior officials at the Department of Energy were saying at the beginning of March that they felt that anti-nuclear sentiment had lost some of its edge, and that the moment might soon be ripe for a major policy statement in favour of nuclear power.

At the moment, the U.S. has just over 70 nuclear power stations generating 13 per cent of its electricity and saving it 1.6m barrels of oil imports daily, worth at today's prices about $1bn a year. However, the dependence of the U.S. on foreign oil is growing yearly, despite the start-up of Alaskan production. Unless domestic fuel sources are developed quickly, the country could be importing well over half of its total oil needs by the next decade.

With the prospects for domestic oil and gas production uncertain because of the high cost of exploration and the near exhaustion of many available fields, the burden will have to be borne by other fuels. Only coal and uranium offer any long-term prospects. Uranium has one advantage over coal that it is easier to mine and produces electricity more cheaply. On a cost scale where uranium is 15, coal is 20, and oil 40.

The nuclear engineering industry believes it could instal enough nuclear power capacity by the end of this century to save about 18m barrels of oil a day, equivalent nearly to total present day consumption. Given the go ahead now, it says it would be able to produce the new generation of fast "breeder" reactors on a commercial basis early in the 21st century.

However, the environmental lobby combined with uneconomic circumstances had all but stifled nuclear power development by the end of last year. Since 1974, nearly 200 orders for nuclear power stations had been cancelled or postponed. Last year only two new orders were announced. Currently 129 power stations are under construction or otherwise in the pipeline. They will all be completed by the mid-1980s. Because of the long lead time, more orders will have to be placed very soon, the industry argues, if the momentum is to be maintained. Not surprisingly the industry is concerned with the threat of recession and unemployment once the orders on its books are completed and it has been mounting a powerful lobby in favour of more nuclear power.

However, the fate of nuclear power has always hinged on the question of safety. That is why the Three Mile Island incident will be so damaging, even though the only victims so far are four workers who have been treated for mild exposure to radiation. But the question has become so tangled in the heat of debate that few can view it unemotionally.

No nuclear deaths

Since nuclear power for peaceful purposes got under way after the last war, there has not been a single death in the U.S. from an accident at a nuclear power station. On average 200 coal miners are killed each year, and at least one person a year dies from gas leaks in New York where more explosive power runs through the mains in a day than was contained in the Hiroshima bomb.

U.S. nuclear insurers have paid out less than $1m in claims since 1957, the year such insurance started.

But as a close observer of the debate remarked "for most people nuclear risks are still in the realm of witchcraft." This was borne out by a recent finding by the Roper Organisation, a public opinion research company, that 48 per cent of the population did not understand what nuclear power was all about. Given that people are reluctant to confess to ignorance, that result is held to under-represent the extent of existing ignorance.

But if the public is confused, the likely effect of Three Mile Island is clearer on Congress, in whose hands the future of nuclear power probably lies. Senator Jackson and his energy committee had been working towards greater acceptance of the need for nuclear energy. In fact the debate among its members assumed that nuclear power would go ahead and concentrated more on details such as how spent fuel should be transported and whether fast breeders should be cooled by gas or sodium.

Doubts on new initiative

However, judging by the immediate reaction of Congressmen to the accident, any pro-nuclear initiative now must be under a cloud. There has been a succession of calls from Capitol Hill for closer monitoring and control of the nuclear power industry and suggestions that the burden of future energy development must be shifted from nuclear power to coal.

The Chairman of the Senate sub-committee on nuclear regulation, Mr. Gary Hart, who visited the strickened reactor with his staff last week, said he would introduce legislation requiring the federal Government to monitor reactors, and assume full control immediately in the event of a crisis.

At Three Mile Island, the Pennsylvania State authorities, the plant management, and the Nuclear Regulatory Commission a federal agency, have all been involved, at times cutting across each other.

Representative Morris Udall has called his House Energy and Environmental sub-committee into session to take testimony from the nuclear regulatory commission—whose own rôle is bound to come under scrutiny because of the crisis.

Mr. Carter, who has never been an enthusiastic supporter of nuclear power, may elaborate his own position on the subject in his energy statement this week. So far, he has only said that the accident points to the need to review safety standards a procedure which itself could take years.

It therefore seems that unless the Three Mile Island emergency can be resolved quickly—which seems unlikely—and also safely, the cause of nuclear power will have been set back by very many years—with possible grave consequences to U.S. energy policy for the rest of the century.

The reactor: British interest: Previous accidents

Three Mile Island 2 is a newly-completed 880 MW pressurised water reactor (PWR) built by the U.S. company Babcock and Wilcox. It was still being commissioned when the accident happened. Its owners, Metropolitan Edison, have operated a slightly smaller (800 MW) reactor of the same kind and make since 1974.

There are more commercial PWRs operating in the world today than all other types of reactor combined. Of a total of 523 commercial reactors operating, under construction or ordered throughout the world, 263 are of this type. It is the reactor used in submarines, including British nuclear submarines. Britain is currently building a PWR in Scotland for the navy to use in demonstration and training.

The Babcock and Wilcox reactor is one of four designs—three American, one German—being evaluated by the British Central Electricity Generating Board, with a view to ordering a commercial demonstration plant in Britain in the early 1980s. The aim of this demonstration would be to see whether this type of reactor holds significant advantages for the electricity supply industry over British designs of gas-cooled reactor. The PWR, with its water cooling, is a more compact reactor—hence its use in submarines. But the most obvious advantage for Britain appears to lie in the fact that much more of the PWR can be prefabricated in the factory than is the case with British designs.

The most obvious disadvantage seems to be that, should an accident occur, events happen more swiftly than with the UK designs, which allow hours instead of minutes for crucial decisions to be taken.

A melt down is the worst kind of accident which can happen to a nuclear reactor. It is the melting of the nuclear fuel when the cooling liquid or gas fails to remove quickly enough the heat that is generated by nuclear reaction.

Britain has suffered two melt-downs in gas-cooled reactors. The first occurred at Windscale in 1957, when many tons of uranium fuel caught fire and burned furiously for 24 hours. In that case the reactor had no enveloping pressure vessel to help seal in the radioactivity. Radioactive vapours escaped from the plant, but radiation levels did not exceed the maximum permitted by international regulations.

The subsequent inquiry by the Medical Research Council concluded that it was "satisfied that it is in the highest degree unlikely that any harm has been done to the health of anybody, whether a worker in the Windscale plant or a member of the general public."

The second melt-down occurred at the Chapelcross nuclear power station, in a 55 MW reactor. No radiation was released, although the reactor was seriously damaged. Unlike Windscale, the reactor was repaired and operating again a year later. Damage caused by a similar accident in a much bigger gas-cooled reactor in France in 1969 was also repaired.

The most dangerous substance likely to be released in any nuclear accident is radioactive iodine. More than 1,000 times as much was released in the Windscale accident as any other radioactive substance. A serious accident at a British nuclear plant would swiftly bring policemen to the doorsteps of those living nearby downwind of the plant, dispensing pills of an iodine compound. By taking these pills, people would saturate their bodies' needs for iodine and reduce the risk of their absorbing any radioactive iodine from the air.

MEN AND MATTERS

The timing of a political novel

There is a grimly prophetic quality about The Ballot, a novel due to be published on April 30, three days before the general election. Written by Rowland Summerscales, a retired Lobby correspondent, it describes a power struggle inside the Labour Party after Parliament has been dissolved and an election campaign is imminent. So the timing by the publisher, Robert Hale, is in itself remarkable enough. But one of the central incidents in the story is a political assassination by the Provisional IRA, by means of a car bomb.

I spoke yesterday to Summerscales, who was in the Westminster press corps for more than a quarter of a century—he is now 66. "The death of Airey Neave shocked me very much," he said. "But it did not surprise me. I have always regarded it as obvious that the IRA would sooner or later try to kill a leading politician."

Summerscales finished off the first draft of his novel 18 months ago. Although he has written four previous political thrillers under a pseudonym, it is 10 years since his last book appeared.

Big bounce

Within a few years, company executives in far-flung offices will be talking to one another by private TV links. At least, that is the forecast of Sid Topol, who is in the business of providing "earth stations"—giving access to satellite broadcasting—at costs he claims even individuals can now afford.

Topol has just been in London, briefing investors in Scientific-Atlanta, of which he is president. The corporation, which has passed the $100m annual turnover mark, was started by six professors from Georgia Tech with 100 dollars apiece.

When radar physicist Topol joined them in 1971 the earnings were $16m a year. But the profs tended to do whatever took their fancy. So he paid $2,000 a day to financial consultants and they steered him towards low-cost earth stations: he has now sold 650 and is mass-producing them at more than 80 a month.

He has his eyes at the moment on America's estimated 300,000 dollar millionaires. Most have ranches, he says, and even now they could be tapping at least 15 satellite TV stations.

Given the nature of most U.S. television, that may seem a curious way to enjoy your wealth. But Topol is not concerned with the ends of his technology, but the means. As one of the bankers listening to him at the weekend remarked: "It's a bit bewildering—all those gigahertz."

Blood and tar

With so much to worry about over the "Muldergate" scandals, South Africa's rulers are hoping that an intensely domestic quarrel will not cause new divisions among their followers. This is the public tarring and feathering of Professor Floris van Jaarsveld, most distinguished of Afrikaner historians.

He was attacked on the platform of a theological conference organised by the University of South Africa. Leading the gang, which calls itself the Afrikaner Resistance Movement, was a former police bodyguard of State President John Vorster.

The "crime" of Professor van Jaarsveld is to have suggested that South Africa should rethink its annual celebrations of the Day of the Covenant, which marks the Afrikaner victory over the Zulus at Blood River in 1838. He says that for some of the country's people the celebrations are an insult.

The University has laid charges against the group which organised the tarring and feathering. But there has been no sign of police action.

The professor took the assault with remarkable aplomb, even trying to continue his 75-page learned dissertation. When one of the attackers tore off his jacket, he helped him with the buttons. "It was my best suit, however," he admitted.

The Afrikaner Resistance Movement justifies the tarring and feathering by saying that it was a defence of "everything that is sacred" against the desecrations of "dissipated academics and false prophets who hide under the mantle of learning."

Yet van Jaarsveld is the author of a standard school history textbook which English-speaking critics have condemned as "blatant Nationalist propaganda."

"Ever since Edge Hill, I keep getting calls from MPs in every sort of marginal."

On her heels

Mrs. Thatcher will not merely be contending with her political opponents in the weeks ahead: she will also have to face up to the fashion writers. I gather that several of the popular papers have already decided to assign women reporters to the Tory leader—to keep the public closely informed on her clothes, make-up and feminine demeanour at the hustings.

The sartorial side of electioneering is treated in a decidedly male chauvenist way, however, in a guide just released by the Clothing Manufacturers' Federation, the Shirt Manufacturers' Federation—and even the Tie Manufacturers' Association. It tells how to score on TV, offering such gems as the need to avoid shirts with frayed or soiled collars, creased suits which look as if they have been slept in, and odd socks or shabby shoes. It says that a dowdy candidate may turn a "don't know" into a firm "no."

But perhaps the voters will be so sated with the accounts of Mrs. Thatcher's style that the men will be able to stay as unkempt as ever, just letting the message speak for itself.

Withy workers

Volunteers stepped in at the weekend to help preserve Britain's ancient craft of basket-making. It has lately been brought almost to a halt by a lack of the basic materials; so the volunteers went to cut withies—as the branches are called—at Saxilby in Lincolnshire. The owner of the willow holt, or copse, is Charles Leggitt, a basket-maker all his life. But he is now too old to do the work.

Mrs. Catherine Wilson, keeper of the Museum of Lincolnshire Life, led the volunteers. She says: "The skill of growing willow for basket-making is fast dying out. The holt had not been cut for three or four years."

The willow will be distributed to basket-makers who cannot at present get supplies.

Lost touch

The following announcement recently appeared in a Colorado newspaper: "Owing to unforeseen circumstances our daily horoscope has been suspended."

Observer

FINANCIAL TIMES SURVEY
Monday April 2 1979

South Korea

South Korea's economic growth during the past decade has been spectacular, particularly since a high proportion of GNP still has to be spent on defence. The country's first "industrial revolution"—based on cheap labour—is no w coming to a close, and the economy is moving towards a greater emphasis on heavy industry. Meanwhile the authoritarian system of government continues to be a source of controversy inside and outside the country.

The race goes on

By Charles Smith
Far-East Editor

THE LATE President Sukarno of Indonesia once described the last year in which his shaky regime held power in Djakarta as "the Year of Living Dangerously." For South Korea, practically every year since the postwar partition of the Korean Peninsula has been a year of living dangerously, but the experience seems to have been invigorating.

South Korea lives in the shadow of one of the largest concentrations of military power on earth (quite a large portion of which consists of its own highly trained and heavily armed forces) but has still managed to build one of the most dynamic peacetime economies to be found anywhere in the world. In the years since the 1973 oil crisis (when most other nations suffered drastic recessions, or at least breaks, in their rate of economic growth) Korea's GNP continued to forge ahead (at the cost, admittedly of very nearly being forced to default on debts to the outside world in the early part of 1975).

Today's Korea appears, on most counts, as one of the most impressive examples to be found anywhere of what is coming to be known as a "new industrial economy"—in other words a nation which has moved from undeveloped to almost developed status in the very recent past and which seems destined soon to challenge the fully developed nations. The average Korean citizen of 1978 was approximately 18 times better off than his 1960 forebear (in current prices) and can expect (if long-term Government projections turn out to be anywhere near accurate) to be four times richer again by the early 1990s.

It all seems too good to be true to western onlookers who have become accustomed to agonisingly slow growth rates and to the apparently insoluble problems of transforming outdated industrial structures. Yet Korea's high growth rate has brought its own problems, and some of them seem recently to have become fairly acute. It may not be too much to suggest that after a decade in which the GNP has seldom expanded by less than 10 per cent per year, the nation has now reached a major economic turning point.

A turning point can mean different things to different people: to the bureaucrats in the prices department of the Economic Planning Board (a body which still exercises supreme control over most aspects of the Korean economy) it means that the time has finally come to do something about the runaway inflation which began to afflict Korea in the second half of the last year, after years of uninterrupted expansion. Prices went up, officially, by 14.4 per cent during 1978, but the real increase is put at between 20 and 25 per cent, and the Government cost of living index registered another four per cent increase in the first two months of 1978.

Crossroads

Tackling the inflation problem has meant not only using the Government's sweeping price control powers to the full (as is currently being done) but deliberately reducing the economy's growth rate through the imposition of tight money. (The target is 9.5 per cent for 1978, but some observers think the economy may continue to gallop ahead at a faster pace however strongly the government applies the brakes.) Dealing with inflation also means imposing severe controls on the amount of foreign exchange that Korean exporters may bring into the country (because too much foreign exchange might produce a dangerous impact on the domestic money circulation).

If one section of the Government sees Korea at a turning point in terms of domestic economic policy, another focuses mainly on the crossroads that the country seems to have reached in foreign trade. Korean exports grew by 40 per cent per year from 1962 (when they were a spectacularly low $55m) to the late 1970s when they surged past the $10bn mark. Exports consisted (and continue to consist) largely of simple manufactured goods, with textiles providing a foundation and the electronics industry (and to lesser extent the newer heavy industries such as shipbuilding and machinery) providing the "cream." They now seem to have reached the point, however, where resistance from Korea's main overseas customers (the U.S., Europe and Japan in order of purchasing importance), calls for some fundamental rethinking.

The Ministry of Commerce and Industry, which has the unenviable task of seeing that export targets are met, admits that the amount of ingenuity required to do this is a good deal greater today than it was a few years ago. What is going to be needed in future is not just ingenuity but a fairly radical change in the make-up of Korean exports, with the emphasis shifting from "vulnerable sectors like textiles to the heavy and more sophisticated products where Korea thinks barriers in world trade barriers may continue to be less formidable.

The switch from light industry to heavy industry and from labour-intensive to technology-intensive products makes sense from another point of view as well. Korean labour, once possibly the cheapest to be found in any Asian country where industrialisation was seriously under way, is no longer particularly cheap by regional standards—a fact which is hardly surprising after several years of consecutive 25 per cent wage increases.

Korea's cost effectiveness according to Government sources is now less than that of Taiwan, its principal rival in basic export industries. The solution to this problem is to upgrade the productivity of labour by switching into more sophisticated sectors: the question which concerns everyone either directly or indirectly with Korea's economic future is asking is: how quickly and easily can this be done?

If the switch is made easily and quickly, which Korean officials claim is possible but which some sceptical outside observers (such as foreign bankers) obviously doubt, attention will shift to one other major problem which could (but it is hoped will not) block long-term economic growth prospects. Korea, like Japan, is a resource-poor country, with almost nothing to boast of in the way of domestic mineral deposits, apart from rapidly depleting supplies of low quality coal.

Competing

To keep up with the 10 per cent rate of growth envisaged for the economy up to 1990 (which in turn is claimed to be necessitated by a 3 per cent annual growth of the labour force. Korea will have to take its place as one of the world's large importers of raw materials, competing with though naturally not equalling, the requirements of Japan and other top industrial countries. To acquire such raw materials may be possible but it will require more careful planning than Korea has put in up to now.

In tackling the new series of problems which seem likely to face it during the first half of the 1980s Korea will have to take account of one major domestic factor. The economy has become more complex after years of rapid expansion and can no longer be managed by a small group of highly skilled and dedicated government planners, as was the case during the first decade and a half or so of industrialisation.

Korea's future will lie more in the hands of the newly emerging big business groups (with names like Hyundai, Daewoo and Samsung) than with the Economic Planning Board during the next five to ten years of economic development. It will, however, be in the hands of very much the same types of people as before: in other words successful management of the economy will depend on clever, highly educated young executives who will from now be working mainly within the private sector and to a lesser extent for the Government.

What no one seriously doubts, as the country contemplates the various options ahead of it today, is that Korea must continue to grow, and must eventually challenge advanced western countries (including Japan) in some of their current economic "strongholds." The rationale for Korean growth is so simple that it is sometimes not believed, but it makes sense to everyone who has spent long enough in Seoul to appreciate the intensity of the South's struggle for power and influence versus the North.

South Korea is engaged in a race to best North Korea in terms of economic potential (and ultimately also in terms of military capacity) in preparation for the no doubt far off day when the current freeze on North-South relations ends and the two halves of the country begin to consider the terms on which reunification might ultimately occur. The race was a more desperate affair in the early 1960s, when the South was predominantly agricultural and the North was already highly industrialised. It is still seen, however, as a matter of life or death—at least by the men who control the economy and make the decisions that count.

Whether the northern challenge also means that Korea has to continue to operate its current highly authoritarian system of government is a more controversial question, and one on which a fairly deep (if publicly suppressed) cleavage of opinion exists within the country. Supporters of the "Korean style of democracy" upheld by President Park Chung Hee (including quite a few politicians who technically belong on the opposite side of the National Assembly) claim that Korea cannot afford political turmoil while the North stands ready to "meddle" in the affairs of the South. It is also said that western-style democracy is not necessarily wholly suited to a society with strong Confucian traditions.

President Park's critics (who are to be found, most vocally among the university intelligentsia and in Korea's large Christian community) say that, while all this may be true, the effect of the system has been to satisfy the taste of a particular set of men for staying in power.

The arguments in favour of more or less democracy in Korea will no doubt continue to rage (and to be reflected outside the country in debates on such questions as whether or not the United States should maintain a military presence on the peninsula). What they seem unlikely to do is to change the actual political climate of the country—at least for as long as President Park and his colleagues remain in power. At 61, and with 18 years of Government behind him, Mr. Park is not exactly a newcomer, but he is probably also a good many years away from retirement. Only after his withdrawal from the scene (and perhaps after similar changes in the Northern leadership) is there any real likelihood that Korea will become a different place from the hard-driving, highly disciplined and dynamic society that it is today.

CONTENTS

Politics

Uneasy democracy

SOUTH KOREA'S political system has evolved from democratic instability in the early 1960s to what President Park Chung Hee calls "Korean-style" democracy. In the process individual freedoms have been whittled down and the Government's hold on power has been gradually but steadily strengthened.

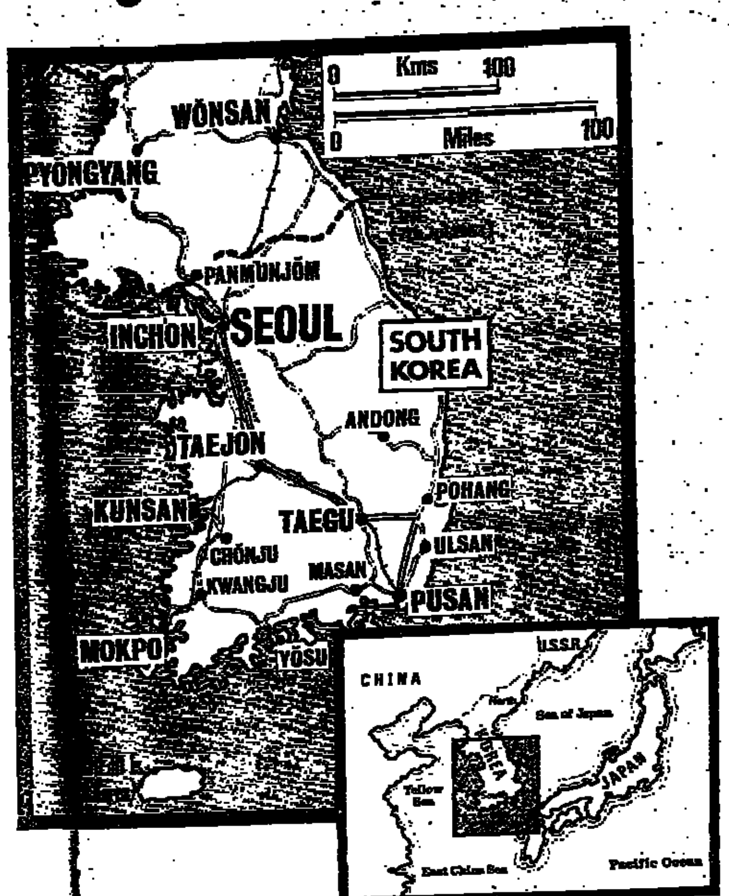
The system has come in for widespread criticism in the U.S., where the fact that U.S. troops are stationed in South Korea to protect a "free" political system makes President Park's authoritarian style of government an obvious target.

At home, the Government has been able to make a good case for the view that a firm hand is needed to produce economic growth and ward off the northern "menace." Even so, the legitimacy of Korea's claim to be a fully democratic society remains a sensitive issue.

The electoral system is one area in which South Korea departs considerably from Western democratic models. The main legislative body is the National Assembly, two-thirds of whose members are elected by popular vote at six-yearly intervals.

The remaining third of Assembly members, however (the so-called Yujeong-hoe or political fraternity for the revitalising reform), are nominated by the President of the republic and then "elected" by a non-political electoral college whose membership requirements ensure a total non-involvement in politics.

The same body, known as the National Conference for Unification, also elects the president, who holds office for six years. One individual can be elected to an indefinite number of presidential terms and President Park Chung Hee (who originally took power in a 1961 military coup) has just been elected to his fourth term of office.



Criticism

Another instance of diminished democratic freedoms is the fact that human rights, while theoretically guaranteed, are in practice in a state of suspense. This is because of the so-called Emergency Measure Number Nine introduced in 1975 which forbids criticism of the country's existing constitution (the so-called Yushin, or revitalising reform, constitution which was introduced by referendum in 1972 and which instituted the indirect system of presidential election).

Those who violate Emergency Measure Number Nine can be arrested without warrant, as can violators of the older anti-communist law which forbids any form of pro-communist or "fellow travelling" activity within a fairly wide range of definitions.

The government does not publish figures for the number of political detainees under these regulations but it is estimated that about 200 people are in detention, leaving aside "short-term" detainees who may be called in for a few hours of questioning. Political prisoners are not known to be subjected to torture today, although physical maltreatment of prisoners may have occurred in the past.

Press censorship in South Korea operates through an informal system of "self-censorship" by newspaper editors, except in the case of a handful of dissident publications which are subject to direct screening by censors. Its effect is to ensure that newspapers echo the official line fairly closely on political or foreign policy issues and to mute criticism of some of the more controversial aspects of the government's economic policy.

A final respect in which South Korea's democracy differs from most Western democratic systems is in the absence of elected local government. The only popular elections held in the country are on a national level, for the two-thirds of the Assembly seats which are not filled by presidential nomination. A partial substitute for elected local government is to be found in the Saemaul Undone (New Community) movement whose leaders are chosen by "consensus" at village (or factory) level.

The fundamental justification offered by the government for withholding full democratic freedoms is that Western-style democratic forms are not "appropriate" for a country which has different traditions and is at a different stage of development from the West. A second point made by defenders of the system is that South Korea cannot afford "political turmoil" while it continues to face a hostile North Korea apparently dedicated to reunification of the country by force.

The introduction of an apparently permanent government majority into the national assembly (based on the one-third of the seats filled by presidential nomination plus those held by the pro-government Democratic Republican Party) is claimed to have made possible the pursuit of a "rational" economic policy which places national above regional interests.

Regional interests are claimed to have interfered seriously with economic policy-making before the institution of the nomination system in 1972.

The main argument against President Park's "Korean-style" democracy is that the system seems to have served to perpetuate rule by the same individuals—or individual, given that the president himself apparently exercises direct personal influence over a wide range of government decisions.

The government's monopoly of contacts with North Korea is another controversial result of the system, though one that can be justified by the claim that the existence of a variety of channels for dealing with Pyongyang would simply increase the north's ability to "meddle" in South Korea's affairs.

Yet another result has been to enable the government to determine very precisely who should benefit, how much, from the extremely rapid improvement in living standards in South Korea during the past few years. The government seems to have used its powers in this area to ensure that the rural population has not been left behind in the race towards better living standards and to prevent too large a gap opening between skilled and unskilled wage earners in industry. Somewhat controversially, it has also forged a close alliance with a handful of top business leaders, at the expense of smaller entrepreneurs and their employees.

PARTY STRENGTHS IN THE NATIONAL ASSEMBLY

	Number of seats won		Percentage of vote	
	1978	1973	1978	1973
Democratic Republican Party	73	68	31.7	38.3
New Democratic Party	61	52	32.8	32.7
Democratic Unification Party	3	3	7.4	10.3
Independents	22	18	28.1	18.7
Yujeong-Hoe	77	73	—	—
Total	231	219		

Criticism of the present system comes, most vocally, from the so-called dissidents who have made a point of attacking the Yushin constitution (despite the ban on criticism incorporated in Emergency Measure Number Nine) and who have sometimes been arrested for their pains.

The dissident leaders include former presidential candidate Mr. Kim Dae Jung (who provided a strong challenge to President Park in the last direct presidential election in 1971 and who was released from "hospital detention" just before the end of 1978). "Rank and file" dissidents are to be found in the Korean Christian community and among teachers and students—but many of the latter apparently graduate to become dedicated employees of the business establishment which provides the main private level support for the Park regime.

Parliamentary opposition to the Park government is provided by the New Democratic Party (and by the much smaller National Unification Party). The NDP under its "middle of the road" leader Mr. Lee Chul-Seung, says Korea has to maintain a "balance between national security and individual liberty" and has confined its criticisms of the government's emergency regulations to debates within the National Assembly.

A more vocal wing of the NDP, led by Dr. Kim Young Sam, the party's former chairman, has attempted to stir up public opposition to the emergency rules and to South Korea's general failure to "measure up the standards" of Western democracy. Dr. Kim claims to have had an enthusiastic response from the half million South Korean residents of the United States but has found his political activities inside South Korea handicapped by indirect government action.

The views of ordinary people about the present political system remain something of a mystery. The fact that the NDP secured a marginally larger vote than the pro-Government Democratic Republican Party in last December's elections to the National Assembly presumably should be read as a mild criticism of the regime—though it would appear that voters were protesting more against price rises and a recently-introduced value added tax than against the Government's stand on the basic issue of democracy versus stability.

A second feature of the 1978 election result which may possibly have disturbed the Government more than the NDP's success, was the participation of very large number of independent candidates (255 as against 161 candidates of officially registered parties) and a sharp increase in the independents' share of the total vote.

South Korea's electoral laws are rigged against independent candidates, who have to pay bigger deposits than registered party candidates and have less freedom to campaign. The fact that so many people chose nevertheless to stand in the election and that so many voters went to the polls (more than 80 per cent of the electorate) suggests that South Koreans have not lost their taste for democracy—no matter how much the Government would prefer them to opt for stability.

Charles Smith

North-South relations

Major differences remain

THE KOREAN peninsula is one of the few places in the world where relations between a Communist and a non-Communist Government continue to be conducted in a style reminiscent of the 1950s. The Government of President Park Chung Nee in the South has no relations, either official or unofficial, with that of President Kim Il Sung in the North. Movement across the Military Demarcation Line, which divides the two halves of the country is forbidden, and there is no telephone link or exchange of mail.

The concentration of military power along either side of the Demarcation Line (or to be exact to the north and south of the four kilometre wide Demilitarised Zone) is one of the heaviest in the world, involving over 1m men and more than 1,000 fighter aircraft (to say nothing of American nuclear warheads). Almost the only concession that North and South have made to the changing mood of the 1970s is to withdraw a ban on the adoption of a "two Koreas" policy by the outside world. South Korea currently has diplomatic relations with 105 governments while the score for North Korea (according to southern sources) is 93. These figures imply a considerable overlap—in other words there is no problem today for a country which wishes to maintain embassies in both Pyongnang and Seoul (provided it does not happen to be a major ally of either the South or the North).

Opinions differ about the likelihood of a military flare-up along the Demarcation Line, with the South claiming that such a thing could quite easily happen. (the tunnels dug by North Korea under the DMZ are cited as evidence of the North's "aggressive intentions") and the North declaring that war is unlikely. What no one appears to disagree about is that the odds against a peaceful reunification of the country are enormous—at least while the present leaderships remain in power.

The Northern formula for reunification, establishment of a confederation which would seek joint membership of the United Nations while the existing authorities continued to run things in their own way on either side of the frontier, is anathema to the South, which favours a step-by-step approach starting with exchanges of mail and the reuniting of divided families.

Because the differences are so wide, and because neither President Park nor President Kim seem to be the kind of men who would willingly step aside in the interests of reunification, the occasional negotiating sessions that have been held between the two sides are apt to be dismissed by outsiders as meaningless rituals, indicating, at best, that one side or the other is trying to gain a few propaganda points that might improve its image in the outside world. This interpretation may be correct, but it overlooks the fact that meetings of any kind between North and South are sufficiently rare to deserve attention—and to justify speculation on what might have prompted the two sides to start talking.

The most prolonged, and promising, series of contacts to have taken place between Pyongyang and Seoul since the Korean armistice were held in 1972 and 1973 when a series of secret high level contacts between the two governments led to the establishment of a semi-official South-North Co-ordinating committee (whose meetings ran for about a year before being unilaterally boycotted by the North). The next occasion when the two sides showed interest in talking to each other was in January this year, when President Park announced his Government's willingness to meet the North "at any time, and place and at any level," and North Korea responded with an elaborate set of proposals for the reduction of tensions and eventual reunification of the country.

The Pyongyang blueprint, which was discussed at series of abortive meetings between the two sides in February and March, proposed the suspension of propaganda broadcasts by both sides, the termination of "hostile military movements" on either side of the Demilitarised Zone, and the covening in October of a "grand national congress" in Pyongyang at which decisions would, it was hoped, be taken on the North Korean plan for the formation of a confederation.

Although South Korea fielded a team to discuss the Northern proposals (and to put its own counter-proposals), its spokesmen have dismissed the North Korean move as "fake" peace offer, partly because it repeats old proposals that had already been dismissed by the South (the confederation idea, for example), and partly because of the obviously tactical nature of some of the other elements in the Northern package.

The proposal to suspend hostile military movements on either side of the DMZ at the beginning of March seemed to be quite clearly designed to put a spanner in the works of "Operation Team Spirit," a joint U.S.-South Korean military exercise which was due to start that month (and which did in fact take place, despite Northern protests). The suspension of propaganda broadcasts proposed by Pyongyang referred to Government radios but con-

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The economy

A change of direction

SOUTH KOREA may not quite deserve to be ranked as the most remarkable economic success story of the 1970s—that distinction probably should go to Taiwan which has achieved almost as much growth with a good deal less inflation during the difficult years since the 1973 oil crisis. But South Korea certainly outclasses virtually every other country in the world because of its sustained record of high economic growth and spectacularly increasing exports.

Korea's GNP was worth just over $2bn in 1961, the year when Major-General (now President) Park Chung Hee seized power in Seoul in a bloodless military coup. At the end of this year GNP should be worth $56bn. Exports were $50m in 1961 but hit $12.7bn in 1978 and are scheduled to reach $15.5bn in 1979. Per capita GNP, which was a mere $82 when General Park marched into Seoul, will be $1,500 by the end of this year, putting Korea just ahead of some of the poorer countries in the "rich man's club" of the OECD.

The simplest and best explanation for Korea's economic achievement is that growth was, and is, a matter of survival. For the past 25 years South Korea has been "racing" its neighbour North Korea to establish a strong economic and political system, with the alternative to failure the probability of eventual unification of the Korean peninsula on Pyongyang's terms.

The race today looks substantially won—the South Korean economy would appear to be between four and five times as large as that of the North in absolute terms, while individual Koreans are probably a few hundred dollars per head better off than their northern counterparts. That does not mean that the South can afford to call a halt; with the labour force growing at over three per cent per year South Korea will need to continue to "deliver" a high growth rate for many years just to provide jobs and opportunities for those who will need them. What does appear to be true is that after a decade of rapid conversion from an agriculture-based to a light industry-based economy South Korea has now reached a turning point in its economic development.

Superficially, all that might appear to be implied by this is that South Korea is adjusting to a slightly less hectic rate of growth after three years of ultra-rapid expansion. GNP growth averaged a real annual rate of 12.4 per cent during the three years up to the end of 1978, almost certainly the highest rate for the period achieved by any country in the world of comparable size (although Taiwan just edged out S. Korea in the economic growth stakes for 1978 alone). The Fourth Five Year Plan, which runs from 1977 to 1981, calls for an average growth rate of 9.2 per cent throughout the plan period (actually it envisaged a 10 per cent growth in 1977 followed by 9 per cent in each of the following four years.

In relation to the Government blueprint S. Korea had thus reached a point by the end of 1978 where it could well afford to cut back its growth rate to more "moderate" levels. The current year's growth target is 9.5 per cent and will be achieved (or possibly over-achieved), not by stimulating the economy, but by a fairly severe set of deflationary policies including the imposition of a tight money policy (in force since the second half of 1978) and a balanced budget.

In deciding to put on the brakes in late 1978, South Korea's economic planners were not simply attempting to bring the economy's growth performance into line with the planned targets. There were also, and still are, signs that years of high speed growth had begun seriously to overheat the economy. The official cost of living index showed a 14.4 per cent rise during calendar year 1978, but the real increase in living costs is thought to have been considerably higher, perhaps as much as 20 to 25 per cent.

The immediate cause of this rather worrying bout of inflation is thought to have been the massive increase in money supply which occurred in 1977 when Korea's unexpected success in winning Middle East construction contracts brought a flood of foreign exchange into the country. The money supply rose by 40 per cent in 1977 and was still increasing at an annual rate of 25 per cent last year (or 34.5 per cent in the case of M2). This occurred despite a series of Government curbs, including a freeze on the repatriation of roughly 80 per cent of foreign exchange earned by construction companies, and a deliberately "engineered" deficit on the current account of the balance of payments.

The Government hopes to hold this year's increase in consumer prices to between 10 and 12 per cent and to keep the rate of increase in money supply down to a "steady" 25 per cent for both M1 and M2. It has powers to place direct restraints on the ex-factory price of 96 key items produced by major local manufacturers, but was obliged to allow many of these to be adjusted upwards during the first two months of 1978 in order to "catch up" with runaway increase in retail prices that occurred in late 1977.

The aim is to keep the prices of such items steady at their new levels during most of the remainder of 1979 but this could turn out harder to achieve than the Government appears to believe. Higher prices for imported crude oil (which supplies 55 per cent of energy needs) still have to be reflected in the general price structure and are expected to add at least 2 per cent to the wholesale price index during the remainder of the year. Another problem that could prove harder to handle than the Government seems to expect involves the stabilisation of Korea's rapidly rising farm prices.

The Economic Planning Board says the Government has deliberately kept farm prices high in the past few years (in order to prevent too rapid a movement of the rural population into the cities). It also admits that a policy of going all-out for self-sufficiency in rice (now successfully achieved) has tended to produce shortages of other types of food including meat and vegetables.

Prices of some vegetables rocketed by as much as 50 per cent during 1978, giving the public what the Government claims was an exaggerated impression of the overall inflationary problem. To deal with the food price problem the Government plans gradually to phase out its policy of preferential treatment for farmers, but it acknowledges that this may take time.

A third major symptom of overheating has been a sharp change in conditions on the labour market. Korea regarded itself as a country with a chronic excess of labour until two or three years ago and planning officials today continue to talk of the need to maximise GNP growth rates in order to absorb a continuing increased in the labour force. In the short term, however, there seems to be no question that Korean employers face a seller's market for labour.

Wages have been going up by around 25 per cent per year for the past three years, with particularly sharp increases in rates for skilled or managerial workers. The Government has been encouraging small companies to increase the wages of their lowest paid workers so as to avoid a (politically dangerous) increase in differentials between high and low paid sectors of the community. It is also, as matter of urgency, taking steps to increase enrolment of students in higher education, so as to increase skilled manpower supplies.

Labour shortages in some areas, however, are clearly not going to disappear overnight, even though Korea still has what most observers would regard a large reservoir of workers in its overpopulated agricultural sector (38 per cent of the total labour force at the last count).

If the Government manages to solve the overheating problems—and there is no reason, given time, to doubt that the problems will be solved—the prospects for the Korean economy will become very much a matter of what happens in the outside world. Growth could be stunted during the next five years or so by a drastic increase in the number of import barriers erected in Europe, Japan and the U.S., or, just conceivably, by global shortages of the imported fuels and raw materials on which the economy is dependent.

The Government's recipe for avoiding these dangers is to bring about a shift in the structure of industry from lighter and more labour-intensive sectors into capital-intensive or skill-intensive sectors. By doing this it hopes to diversify Korea's exports out of the areas (such as textiles and electronics) in which protectionism is a major problem. The shift towards high technology industries would also increase the amount of value-added in Korea's manufactured exports and thus in the long run make the economy less dependent on imported raw materials and fuels.

The Economic Planning Board, which masterminded the first phase of the country's industrial development, claims to be confident that the economy can generate enough savings to finance investment in heavy and advanced industries and that Korean workers and managers will be able to rise to the challenge of turning out computers instead of black and white TV sets and textiles. What it appears to feel marginally less certain about is its own role in piloting the country through to its next phase of development.

Supervised

Hitherto Korea has had one of the "Free World's" most tightly supervised economies, with the Government initiating almost every major investment by the private sector and wielding enough power to ensure that companies which make such investments also make a profit. The EPB expects to have to abandon this type of planning in the next phase of the country's development in favour of a more general approach based on resource allocation and the setting of broad targets for the development of major sectors. It will have to relax its grip on the planning process for the very simple reason that Korea's economy will be far too complex by the early eighties to respond effectively to centralised control by a handful of bureaucrats.

The EPB's general air of confidence could mask a few doubts about the future. Not everyone agrees that Korea will make the transition to high technology industries as easily and rapidly as it switched from an agriculture-based to a light industry-based economy between 1965 and 1975. "The Koreans think they can start turning out turbo-generators in six years. Our experts think it might take 25 years" is how a diplomat at the Seoul Embassy of one of Korea's major Western trading partners expressed these doubts recently. There are also a variety of views on the seriousness of the protectionist threat to Korea's exports, which constitute a vital 35 per cent of GNP.

Korea does not pretend to be unconcerned about protectionism. But the planners who opted for high growth and rapidly growing exports at the risk of becoming over-dependent on world trade could still turn out to have had sounder instincts than advocates of a more cautious strategy. Other countries besides Korea have been making a dash for growth in the past few years on the assumption (which could well prove to be correct) that export-led expansion policies will prove harder to pursue in the eighties than in the seventies. Whatever happens, Korea is unlikely to have any reason to regret that it joined the race.

Charles Smith

Differences

CONTINUED FROM PREVIOUS PAGE

veniently left out of account a South Korean "liberation radio station" which, apparently, operates from just north of the military demarcation line, though purporting to be located in the south.

A broader interpretation of the motives for the northern peace move which is circulating in Seoul suggests that various external events (and one major internal development) might have prompted Pyongyang to start talking. According to this theory North Korea could be seeking to forestall pressure from China for the normalisation of North-South relations, assuming, as most people do, that China was urged to use its good offices in this direction when Vice Premier Teng Hsiao-ping made his recent trip to Washington.

Another North Korean objective could be to reassure the American public of its peaceful intentions towards South Korea at a time when the future of President Carter's plan for the withdrawal of U.S. troops from the South seems very much in the balance. Finally, and most intriguingly, there is speculation that the North might have been having second thoughts about its traditional policy of relying on the maintenance of decisive military superiority over the South to bring about ultimate reunification.

The point being made here is not that North Korea does not wish to maintain military superiority, but that it may be reaching a point in its economic development where such a policy is no longer viable. North Korea (according to South Korean intelligence sources, which may not necessarily be correct) spends between 20 and 25 per cent of its GNP on defence, whereas the south claims to spend around 6 per cent. However, the South's GNP has been growing considerably faster than that of the North and is now possibly five times as large (about $48bn in 1978 compared with the (very roughly) estimated northern figure of $8bn-$9bn). This would appear to mean that the absolute level of defence expenditure (as opposed to the ratio of defence to GNP) may now be roughly the same in both halves of Korea with the South tending to catch up on (and overtake) Northern defence spending.

Southern analysts claim that the cumulative total of North Korean defence spending since the end of the Korean war is between two and two and half times that of the South. The North also has more men under arms, even though its population (estimated at 17m) is barely half that of South Korea. The North may continue to have a larger army for the foreseeable future, but Northern firepower, according to southern analysts, could be overtaken by that of the South by the mid-1980s if present trends continue. This will remain true even if American intelligence is correct in its recent reassessment of Northern armed strength (according to which the North may be about 25 per cent stronger than was previously believed).

If South Korean analysts are right in believing that the North may eventually lose its military edge, the North would seem to have three policy options—none of them easy or attractive. One would be to launch an early attack on South Korea, taking advantage of the North's present military superiority. If such an attack were launched it appears that North Korean forces might well be able to occupy Seoul, which lies only 35 miles from the military demarcation line, but there would be a danger of (possibly nuclear) retaliation from U.S. forces in or near Korea, which could well be enough to make the North hold its hand.

A second policy option would be to switch to a full-blown "peace strategy"—in other words to make a real attempt to reduce tension in Korea and promote normalisation of contacts between the two halves of the country. The third alternative open to North Korea would seem to be change its economic policy: in other words Pyongyang might start looking to the West, as China is doing, for loans and other forms of assistance which would enable it to modernise and expand its economy.

Recent speeches by North Korean leaders, including President Kim Il Sung's New Year address, have indicated a growing concern with economics and with the expansion foreign trade (not just with communist and Third World countries, but with all countries). However, there is no real indication that Pyongyang is planning to embark on an open door economic policy similar to that adopted by China. One reason why this would be difficult is that the North is already heavily in debt to western creditors (with more than $1.2bn owed to Europe and Japan since the end of 1975) and is thus in no position to ask for fresh assistance.

"If North Korea is not in a position to "do a China" in terms of its economic policy, and if it lacks the audacity to pursue the opposite extreme of launching a surprise attack on Seoul, diplomacy would seem to be the main area in which scope exists for new policy initiatives. The North's biggest diplomatic asset at present would appear to be the fact that it is on reasonably friendly terms with both China and the Soviet Union and is thus in a position to be "courted," not only by the Chinese and the Russians, but by any other power which hopes to prevent the emergence of a strong Moscow-Pyongyang axis.

One nation which would certainly not wish to see North Korea aligning itself firmly with the Soviet Union is Japan, to whom Russia is a large and alarming neighbour, with an uncomfortable tendency to send warships and fighter aircraft into areas bordering on Japanese sea and air space. The U.S. also has good reason to dislike the prospect of a Pyongyang-Moscow alliance, since one of the first benefits likely to accrue to the Russians from this would be the acquisition of a naval base in a north Korean warm water port. The Russian card may be the strongest one that Pyongyang holds at present, but it may still not be strong enough to give North Korea the upper hand in its battle to gain power and influence versus the South.

C.S.

U.S. relations

Tensions have eased

"I THINK 1977-78 was as *difficult a period between treaty allies as could be imagined.*" The speaker was Mr. Richard Holbrooke, U.S. Assistant Secretary of State for East Asian and Pacific Affairs, giving his estimation (during a visit to Seoul on March 17) of the state of U.S.-Korean relations. Mr. Holbrooke went on: "We had a culmination of stresses and crises which could have torn the treaty alliance apart . . . I refer to the so-called 'Koreagate' problem, to the congressional scandals, to grave misunderstandings and concerns—which we felt were exaggerated but nonetheless were real—over the troop withdrawal policy and to the question of human beings' individual freedom and dignity.

"The later part of 1978 showed a significant improvement in these areas . . . we view 1979 as a year for strengthening the relationship.

"We assess the U.S.-Korean relationship as having been on an ascending curve over the last few months. . . . now things that do go up can go down and I don't want to leave the impression that I am predicting a smooth course or a trouble-free future because that clearly is very *difficult in a situation that is as fundamentally complex as* this one. But basically things have gotten much better and we *believe we have weathered the* crisis."

No one could suggest the Assistant Secretary of State was *glossing over the extreme tensions* that had marked the relationship between Washington and Seoul during the past 2½ years. *The tensions were at* times extreme, reflecting the very high degree of dependence that South Korea has had on the U.S. for the past 25 years and the sudden realisation—on both sides—that the relationship had changed fundamentally.

Recognition that the tensions have now eased and that the new relationship is being accepted will come later this year with the visit to Seoul by U.S. President Jimmy Carter, following his stay in Japan to take part in the developed nations economic summit meeting in Tokyo in June.

Although the visit will be brief, Mr. Carter and South Korean President Park Chung Hee have a great deal to discuss. The policy adopted by the U.S. Administration as soon as Mr. Carter came to office of the gradual withdrawal of the 30,000 U.S. ground troops in Korea by the early 1980s has caused intense and continuing anxiety in Korea. There is a firmly held belief among virtually all Koreans that it is only the presence of U.S. ground forces that has prevented North Korea from launching an invasion attempt during the past 10 years.

The bulk of the U.S. forces are deployed in the 25 miles of hilly country that separate Seoul from the demilitarised zone (DMZ) which forms the border between north and south. Because of the nature of the terrain along the DMZ, any invading force would have to pass through the area garrisoned by the Americans, thereby immediately involving the U.S. in military operations alongside the South Koreans.

Despite frequent and public assurances by the U.S. in the past few years that there will be no reduction in U.S. air or naval forces in the Korean region, and despite a US$ 800m programme to beef up the military hardware of the South Koreans, Seoul remains unconvinced.

Hope

Early in March, Prime Minister Choi Kyu Hah told the Americans that "it is our sincere hope that (you) will deal very prudently with the question of future troop withdrawal in view of the rapidly changing international situation and the additional military build up in North Korea so as not to disrupt the military balance on the Korean peninsula."

The Koreans were certainly not reassured when a recent reassessment by the U.S. of intelligence data showed that the North Korean army had about 170,000 more men and considerably more tanks than had previously been thought. It gave the U.S. pause as well, and the troop withdrawal programme has been "held in abeyance" pending further analysis of the reports.

To some observers this seems the perfect excuse that Mr. Carter needs to drop the withdrawal policy, which has become increasingly unpopular in the U.S. Congress and has never been accepted by the Koreans.

It seems likely that any announcement on the future of the policy will be delayed until Mr. Carter speaks with President Park, and few doubt that the "discovery" of the extra northern divisions will see Mr. Carter's unpopular campaign promise scrapped.

That alone should ensure that U.S.-Korean relations remain on an "ascending curve." It may also be the goodwill gesture Mr. Carter needs to counteract criticism the U.S. President is bound to make of South Korea's human rights record. Just how Mr. Carter will raise the issue is uncertain, but it is accepted by both Korean and U.S. officials that the severe restrictions that are applied to freedom of speech and political activity under the *Yushin Constitution* and emergency decrees drawn up by President Park will be raised by Mr. Carter.

Very few contacts between U.S. and Korean officials take place without human rights issues being mentioned in some form. The Koreans feel the Americans are ill-informed about the concept of civil rights in a society such as Korea, and that what may succeed as a form of government in the U.S. is not applicable to South Korea. However, they realise they cannot simply ignore such a fundamental part of Mr. Carter's foreign policy.

Seoul took a major step at the end *of last year to ease this* irritant in its relations with Washington by releasing from detention more than 1,000 *political prisoners, including former* Presidential candidate Kim Dae Jung, who has become a symbol among U.S. liberals of the *Korean dissident movement.*

Although Mr. Kim has been closely watched since his release he has been able to criticise the *Park Government* without incurring anything worse than warnings that he is breaching his parole.

Mr. Kim's release was seen in Korea as being the result of continuing U.S. pressure and directed at U.S. opinion which was turning away from Korea in the aftermath of normalisation of U.S. relations with Peking. Mr. Kim himself has played on this and on the coming visit of Mr. Carter to keep up his criticism of Mr. Park, and has asked for the opportunity to meet Mr. Carter when he visits Seoul—a request that is unlikely to be granted.

Whatever Mr. Carter's comments on human rights, they will only represent a continuation of existing pressures, so they are certain to be accepted with good grace.

One area Mr. Carter will not have to worry about is the so-called Koreagate scandal in which rice-dealer Park Tong Sun and former Korean ambassador to Washington Kim Dong Jo were implicated in allegations of bribery of U.S. senators and representatives. Although extensive investigations in the U.S. last year finally established that some illicit payments had been made—and legal machinery is still moving on some cases—the issue no longer raises the heat it did in 1978 and 1977.

The demand by the U.S. Congress that Mr. Park and Mr. Kim appear before its committees in Washington, brought relations between the U.S. and Korea to a very low level. Seoul initially resisted persistent U.S. pressure before allowing Mr. Park to testify, with personal immunity from prosecution. Mr. Kim Dong Jo never made the trip to Washington, and in retaliation the Congress vetoed $56m of food aid.

Mr. Carter may face a more testing time when the subject turns to economic relations. In this area, as much as in military affairs, there has been a fundamental change in the relationship.

The rapid economic growth of South Korea in the 1970s has changed the ties with the U.S. from those of dependence to those of balance—although not to the extent that U.S. trade officials would like, as Korea last year recorded a trade surplus with the U.S. of $1.1bn.

The largest segment of this trade is in textiles and garments, areas which the U.S. are now subject to intense protectionist lobbying. Although the two countries have a three-year textile trade agreement giving quotas and an amount of growth to the Korean industry, there are continuing efforts at tightening controls which the U.S. industry claims are being bypassed.

The Koreans are trying to head off some of this trade friction by purchasing, with *accompanying fanfare,* considerable quantities of American commodities. Later this year Seoul is sending a big buying mission to the U.S. to sign up suppliers of goods ranging from biscuits to machinery. Whether these deals would have been made anyway is a matter for debate.

However, the U.S. does see new openings for its products in the medium to heavy industrial sector of Korea. Notable among these are aircraft, nuclear power plant and machine tools.

If Mr. Carter's visit to Seoul can reassure the Koreans that there is no wavering in the U.S. military commitment to South Korea, while bringing home the need for the U.S. to maintain a reasonable balance in trading, U.S.-Korean relations will, indeed, maintain the "ascending curve" that Mr. Holbrooke forecast.

Ron Richardson

Links with Japan

Trade friction increases

SOUTH KOREA and Japan are close partners in one sense and bitter rivals in another. Japan's stake in the fast growing Korean economy, through trade and direct investment, is far larger than that of any other nation and Korea is the second largest market for Japanese exports (absorbing goods to the value of 60 per cent of Japan's exports to the whole of the EEC). Add to this the fact that Korea has borrowed from Japan many of the successful development policies pursued over the past decade, and one can see that the two countries have done a good deal to contribute to each other's progress.

The rivalry is a mirror image of the partnership. Korea aspires to displace Japan from its position as undisputed world market leader in industries *such as shipbuilding* and consumer electronics—or at least to challenge that position with its own cheaper products. There *is also a feeling* that by beating Japan at its own game, if such a thing becomes possible, Korea will be getting its own back for *several centuries of history* in which the Japanese have very definitely had the upper hand. Korea was a Japanese colony for 36 years up to the *end of* World War II and has not forgotten the severity with which the colonial rulers tried to impose on a reluctant local population their language and culture. Two hundred years before that the Koreans spent *years fighting off a series of* Japanese invasions which devastated much of their country.

The post-war relationship between Japan and South Korea dates, for all practical purposes, from 1965, when President Park *Chung Hee successfully* tackled the issue normalising diplomatic relations with Tokyo. (His predecessors had ducked the issue because of a strong popular antipathy against Japan.) From the time of normalisation onwards Japanese loans and investment began to flow into Korea in rapidly increasing quantities, and Korea quickly became dependent on Japanese supplies of semi-processed industrial materials to feed its textile and other fast growing light industries.

Japan's investments in Korea take the form of joint venture participation in about 340 separate enterprises, ranging from small-scale assembly operations to major petrochemical or heavy industrial complexes. The Japanese investment in such ventures represents about 60 per cent of the total value of foreign investment in Korean industry and can be classified (in chronological terms) into three separate phases.

Objectives

Japanese companies first invested in Korea in the late 1960s and early 1970s with the straightforward objective of making use of cheap Korean labour to assemble imported components. From the early 1970s onwards Korea acquired the added attraction of being a manufacturing base from which Japanese companies could export to the United States without encountering the barriers which were being erected against goods directly shipped from Japan.

Today the introduction of direct barriers against Korean imports in the U.S. and Europe has undermined the second of these advantages, while Korean labour is a good deal less cheap *than it was.* There is still scope, however, for technology-based Japanese investments (i.e. projects where the Japanese partner acquires a stake in a Korean joint venture in return for providing know-how. It also appears that Japanese *companies* with Korean joint ventures in consumer electronics or other light industry sectors may have started using *their* Korean affiliates to fill part of the Japanese quotas for such goods in the U.S. or Europe (thereby earning "*Japanese prices*" for goods produced by Korean labour).

Because of Japan's investment presence and because geographical proximity gives it a strong competitive advantage in terms of freight rates and delivery times, Japanese goods have outpaced competing western products in the Korean market for the past decade. Japan supplied 44.5 per cent of Korea's imports in 1967 and still held a 40 per cent share in 1978, despite a conscious effort by Korea to diversify imports. The bread-and-butter of Japan's sales to Korea consists of the bulk shipments of semi-processed industrial raw materials for the textile industry and of components for the electronics and other light manufacturing industries.

A significant portion of the total appears to be bought in under contract from Japanese-Korean joint ventures (some of which are obliged by their terms of operation to concentrate procurement in Japan). The Korean Government now strongly discourages local participants in Japanese joint ventures from committing themselves to Japanese procurement. Despite this one of the major synthetic fibre joint ventures, whose terms of operation do not oblige it to buy from Japan, still relies on Japanese raw materials for two-thirds of its needs, with the remaining one-third coming from West Germany.

The Japanese investment presence has also produced the converse result of stimulating Korean exports to Japan. Approximately one-third of Korea's exports to Japan in 1978 consisted of textiles, whose value was far ahead of any other country's textile sales in the Japanese market. The bulk of thes shipments appears to have come from Japanese-Korean joint ventures established in the early 1970s at a time when high labour costs were undermining the ability of the Japanese textile industry to supply on its own domestic market.

Korean officials are honest enough to admit that their country owes a good deal of its recent economic success (particularly during the early stages of industrialisation) to Japanese investments and to regular supplies of cheap Japanese materials. This does not alter the fact there is profound dissatisfaction about some aspects of the economic relationship with Japan. Frictions centre around the imbalance on bilateral trade, which has grown continuously and rapidly since 1975 and which, last year, was almost double Korea's global trading deficit ($3.35bn compared with an overall visible trade deficit of $1.8bn).

Japan's exports to Korea in 1978 grew by 52 per cent despite (or perhaps even because of) the fact that the yen was appreciating rapidly against the won during much of the year. There is evidence that Korean importers rushed to buy Japanese goods during the first half of 1978 in order to avoid having to pay the higher prices that were *expected* to result from revaluation. While Japan was achieving a spectacular increase in its sales to Korea, Korean *exports* to Japan rose by a much more modest 22 per cent (that is by a slower rate than the overall percentage increase in Korean exports during the same period).

They might well have grown faster, in the view of many Koreans, if Japan had not maintained import quotas (or other types of restriction) on a variety of major export items including five varieties of fresh and dried fish; edible seaweed (an important commodity in the Japanese market); leather footwear; baseball gloves; and raw and processed silk. Japan does not maintain barriers against Korean textiles and electronic products of the kind which are now becoming general in Europe and the U.S. However Korean manufacturers of many types of light industrial goods seem to have found the Japanese market fairly hard to penetrate (with a few notable exceptions such as the tyre industry).

However much South Korea might wish to achieve a better balance in its trading relationship with Japan, there is probably nothing it can do that would change the relationship overnight. The chances of Korea persuading Japan to lift its restrictions on fish imports appear slim given the strength of the Japanese fishing lobby and the relative lack of ways in which Korea can bring pressure to bear on Japan without damaging its own economic interests. What Korea can do, and has been doing, is to restrict Japanese economic activity through various forms of "administrative guidance."

Korean importers of textile machinery have been encouraged during the past two years to make their purchases in Europe rather than Japan. At the same it would appear that Korean companies seeking partners for new joint venture projects have been told to look elsewhere than in Japan. This could be one reason why Japan accounted for only 38 per cent of new foreign investment in Korea during 1978 (in contrast with its 60 per cent share of cumulative foreign investments up to the end of 1977).

A series of other administrative devices which are not ostensibly directed against Japan nevertheless seem to have served in practice to hinder the expansion of Japanese business activity in Korea. One example is the Korea Trade Transaction Law, which obliges foreign trade companies to seek permission from the Korean

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Trading companies

Group system wins more exports

MANY COUNTRIES, including Mexico, Singapore and reportedly even France, have copied or considered trying to copy the hitherto unique institution of the Japanese general trading company (*sogo shosha* in Japanese). The only country which seems to have succeeded is South Korea.

South Korea had 13 officially-registered GTCs in 1978 and has 12 today (one dropped out at the beginning of the year after failing to meet the conditions for GTC designation). The group of companies bearing this privileged and exclusive label sold 32 per cent of Korea's exports last year and probably will sell more than 40 per cent in 1979.

This is enough to prove that the GTCs represent a major element in the export-oriented South Korean economy. Whether they are also a helpful and positive element so far as the rest of the economy is concerned is still partly open to question.

South Korea's Ministry of Commerce and Industry, which is responsible for seeing that the country meets its export targets, came up with the idea of creating GTCs in 1975, after concluding that the far-flung branch networks of Japan's *sogo shosha* had a lot to do with the global success of Japanese exports. The requirement for GTC status in the first year was that exports should exceed $50m and only one company qualified (Samsung Company, the long-established trading arm of the Samsung group). In subsequent years requirements were stepped up considerably as more and more of Korea's leading business groups joined the queue to win GTC status.

The 1979 qualifications include: exports equivalent to at least 2 per cent of the national export figure for 1978 (this works out at about $254m per company); sales of at least five different items to reach or exceed $1m-worth per item; an international branch network of at least 20 offices; and public quotation of the company's shares on the Seoul Stock Exchange.

The 12 GTCs registered by the government this year include two companies which did not, in fact, meet all of these qualifications. One, the semi-official Koryo Trading Company, was given special treatment because it handles small orders for small and medium-sized business enterprises and therefore could not be expected to equal the turnover of competitors dealing in bulk orders. A second company, Hanil Synthetic Fibre, scraped through because it was able to convince the authorities that its indirect exports of artificial fibres (through other South Korean companies) should be added to the figures for its direct exports recorded in the customs statistics.

In return for fulfilling the qualifications set by the government the GTCs receive various privileges. They can become members of any or all of the export associations organised within major South Korean industries (which means they can acquire a larger volume of export intelligence at a lower cost than non-GTCs are able to do). They can select their own "main" banks (unlike ordinary South Korean companies which have their main banks designated for them by the Bank of Korea.

Their overseas branches, or subsidiaries may raise foreign currency loans without reference to the strict guidelines which apply to offshore borrowing by the rest of South Korean industry. And they pay lower fees than ordinary companies for the processing of export contracts required by South Korean law.

The list of privileges and immunities granted to GTCs does not provide the full explanation of why the system works and why Korean general trading companies can show a profit, despite the enormous overheads involved in running a big overseas branch network staffed by highly paid executives. All the GTCs (with the exception of Korea Trading Corporation) also happen to be members of large, diversified, industrial groupings. They start out therefore with the advantage of having a "tied" clientele for their overseas marketing activities.

Daewoo, the number one GTC in 1978, belongs to the same family of companies as a top electronics manufacturer, a leading heavy industry enterprise and one of the biggest textile concerns. A similar set of relationships is enjoyed by Samsung Company, Hyundai Corporation and the rest of the 12 GTCs.

On average, South Korean GTCs depend on group members for about 50 per cent of their export turnover while picking up the rest of their business from smaller, unattached clients. GTCs are encouraged by the Government to acquire subsidiaries and, therefore, are tending to draw within their orbit more and more small and medium-sized concerns which find themselves in need of powerful friends. In a majority of cases GTCs also perform an overall planning and co-ordination function for the groups of which they are members.

The GTC is, therefore, in a very real sense the "core" of the group to which it belongs and the designation of GTC can be said to confer "group status" on the whole family of companies to which the company concerned is related. The central role accorded to the GTC fits in naturally with the emphasis on exports which pervades South Korea's entire economy. It provides a contrast, however, with the situation in Japan where a *sogo shosha* may, or may not, play a central role in the group to which it is related.

The Ministry of Commerce and Industry, which administers the GTC system, says that the companies concerned enjoy one other important benefit. They are attracting the brightest graduates from top universities, in contrast with the situation of a few years ago when the toughest competition was for jobs in the government.

The drawback of the GTC system, as seen by the companies which have qualified, is that government guidelines are too ambitious and make it too hard to register profits (although all 13 GTCs did, in fact, report profits for the year 1978).

In the view of ordinary South Korean trading concerns which have not managed, or tried, to win GTC status the system is open to more radical objections. They argue that the creation of GTCs has served merely to concentrate the business of selling Korean exports into fewer hands—not to increase the overall amount of business faster than it would have increased anyway. Concentration of ownership and control could be dangerous, according to the system's critics, although it may appear harmless while the economy, and exports, are growing fast and everyone is becoming rapidly better off.

The Ministry of Commerce and Industry admits that critics of over-concentration could have a point, but says the GTCs have created an "atmosphere" of export promotion which has helped the country as a whole.

The Ministry has one other specific concern—to see the GTCs increase their role in the handling of imports. The 13 GTCs handled only 4 per cent of the nation's total imports in 1978 (compared with 32 per cent of its exports) and seem to have faced difficulties in taking over import business from state corporations (in the case of cotton) or from industry itself (in the case of many other industrial raw materials).

GTCs may well play a leading role in the new phase of overseas resource development which will have to accompany the further growth of South Korean industry. Meanwhile, successful or otherwise, they are at least free from the worry of foreign competition. A non-South Korean trading company requires approval from the (private sector) Korean Traders' Association to open a full operating branch in Seoul. So far not a single approval has been granted.

C.S.

THE GENERAL TRADING COMPANIES

Company name and date of designation	Number of overseas branches	Exports in $m 1977	1978
Samsung Company, May, 1975	33	390.1	493.4
Daiwoo Industrial Company, May, 1975	34	361.8	705.8
Ssangyong Industrial Company, May, 1975	23	117.1	264.5
International Chemical Corporation, Nov., 1975	23	297.4	472.3
Hanil Synthetic Fibre Industl. Company, Dec., '75	20	127.0	188.3
Korea Trading Company, April, 1976	5	23.7	31.3
Hyosung Moolsan, August, 1976	24	152.8	337.8
Bando Trading Company, Nov., 1976	25	198.8	392.6
Sunkyong, Nov., 1976	25	176.2	283.4
Sam Wha Company, Dec., 1976	21	167.1	260.6
Kumho Company, Dec., 1976	23	135.0	256.0
Hyundai Corporation, Feb., 1978	30	323.3	259.7
Yulsan Industrial Company, Feb., 1978	21	91.9	150.7
Total	307	2,562.6	4,033.3

Note: Yulsan Industrial Company did not apply for GTC designation in 1979.

GROUP INTERESTS

Samsung Company:	Textiles, garments, department store, sugar refining, hotels, electronics machinery, shipbuilding, rolling stock, defence, construction. (22 companies)
Daewoo Industrial Company:	Heavy industry, construction, electronics, shipping, finance, insurance, leather, textiles (23 companies)
Ssangyong International Chemical Corporation:	Cement, electronics, chemicals, university (11 companies) Footwear, textiles, paper, electronics, construction, shipping, transport, securities (22 companies, approximately 200 subsidiaries)
Hanil Synthetic Fibre:	Synthetic fibres, wool spinning and weaving, petrochemicals (6 companies)
Koryo Trading Company:	100 per cent owned by Korea Traders Association, specialises in small orders
Hyosung Moolsan:	Tyres, leather products, tannery, nylon (8 companies)
Bando Trading Company:	Member of Lucky Group, electronics, chemicals, mining construction, petroleum refining, securities (32 companies)
Sunkyong:	Textiles, electronics, machinery, rubber, tourism (12 companies)
Samwha Company:	Footwear, raw silk, silk fabric (25 companies)
Kumho Company:	Tyres, electronics, bus transport, bicycles (12 companies)
Hyundai Corporation:	Construction, automobiles, shipbuilding, heavy industry (17 companies)
Yulsan Industrial Company:	Shipping, aluminium, construction

Friction

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Traders' Association before they may open full branches in Korea. The KTA has yet to issue a single approval and appears unlikely to do so, with the result that foreign trading companies are effectively banned from carrying out import or export transactions in their own right on Korean territory. (They may act as "offer agents" for Korean importers but may not buy or sell goods in their own names.

The reason why the KTA has not permitted the opening of foreign trading company branches is understood to be that it believes the major Japanese trading companies (Mitsui and Mitsubishi, etc.) would represent formidable competitors for Korea's fledgling general trading companies (GTCs) if given a free hand. Korea probably has much less reason to fear that western trading concerns might take over the handling of its imports and exports.

Restraint

South Korea's banking regulations also serve as a restraint on Japanese business activity, although less drastically so than in the case of trading company branch approvals. The Bank of Korea has allowed four Japanese banks to open full branches in Seoul, which means that Japanese banks have been given numerically equal treatment with British and French banks, despite the overwhelmingly larger stake of Japan in the Korean economy. The Japanese authorities have restricted Korean banks to the opening of the same number of branches in Tokyo (which means that the Korean banking presence in Japan is much smaller than that of major western European countries.

Korea seems to be aware that its policy of import liberalisation, introduced last year, could work in favour of Japan and against the interests of less competitive exporters from the West. To minimise the advantage given to Japan the Government appears to have made a point of selecting items in which European industry is strong (eg biscuits) for inclusion in the initial rounds of liberalisation. Ultimately Korea may have to open its market to products in which Japan enjoys a strong global competitive edge (for example cars). The hope is, however, that when that time comes Korean industry will itself have grown strong enough to hold its own against Japanese competition.

C.S.

Banking

Competition and conformity

SOUTH KOREA'S banking is a curious mixture of competition and guided monopoly. On the one hand five nationwide commercial banks—all partly *Government owned* — vie with eight Government-owned specialised banks, ten private regional banks and about two dozen foreign banks for chronically-scarce funds.

On the other hand, the *Finance Ministry* and its off-shoot the Bank of Korea, exercise comprehensive control over both the commercial and specialised banks, leading to a high degree of uniformity in *their behaviour. The Bank of* Korea is involved in the operations of the commercial banks up to the level of appointing senior officials and even to issuing detailed instructions on the day-to-day functioning of the institutions.

The structure of South Korean banking gives a deceptive impression of diversity. At *the top of this structure are the* five commercial banks—the Commercial Bank of Korea, the Choheung Bank, Hanil Bank, Korea First Bank and the Bank of Seoul and Trust—which are all effectively state-run.

The Government is the largest shareholder in all except Commercial Bank of Korea, from which it transferred most of its equity stake to the Korean Traders Association in 1972.

All these banks have their head offices in Seoul and operate a network of nationwide branches. With similar historical backgrounds and with strong intervention by the government in their development, the five city banks have *been brought to a close* uniformity in their organisation. Each is about the same size in terms of capital, deposits and loans outstanding and the number of branch offices.

In addition, a strong *uniformity prevails* in the banks' management. Interest rates are agreed by the Bankers Association, in conformity with maximums set by the Bank of *Korea, while dividend payments* are also subject to government approval — and are almost uniform.

Even though the commercial banks seemingly compete with each other, in practice the high level of regulation imposed by the Bank of Korea has severely limited this competition.

Reserves

The city banks rely heavily on the rediscounting facilities of the Bank of Korea because of *a chronic shortage of domestic* savings in South Korea's banking system relative to the very heavy demand placed on the banks by industry for finance. The bank meets this demand for funds on highly-selective terms, giving priority to those areas (such as export industries) deemed to be nationally important rather than the most profitable.

The other contributing factor to this fund shortage is the high level of statutory reserves required by the Bank of Korea. Not only does the central bank *have the power to set and alter* the minimum ratios of reserves that the banks must maintain against their deposit liabilities, but it may also set different ratios for different *types of* deposits.

It is perhaps not surprising that a private study of the com*position of the lending port*folios of the city banks showed *that not only were they almost* identical in terms of industries supported, but that changes that had taken place in this breakdown in the past five years were almost the same for *all* five banks.

Complementary to the city banks in function, but com*petitive for funds are the 10* regional banks. These privately-*owned* institutions have been set up during the past 10 years to help finance the development needs of provincial areas.

Previously it had been found that the regional deposits with the commercial banks (and with *the specialised banks)* had been flowing away from the provinces to finance development projects in the major cities or government-promoted industrial areas. The regional banks have acted as a counter to this drain and accordingly their major customers are usually smaller local enterprises and utilities.

The much larger system of specialised banks—eight in all —are answerable directly to the Ministry of Finance. They were *established progressively*—starting with the Korea Development Bank in 1954—to provide the long-term or special-purpose funding necessary in the developing Korean economy.

Initially these specialised banks were operating in areas which the commercial banks had been unable to satisfy, and operated with government funds as part of their resources.

However, in recent years, the amounts borrowed from the Government have declined relatively, while other sources *such as bank debentures,* deposits and foreign borrowings have increased. As a result, the specialised banks have strengthened their ordinary banking *business in competition with the* commercial banks, and now *capture a sizeable* volume of ordinary deposits.

At least two of the specialised banks — Korea Development Bank and Korea Exchange Bank —compete directly with the city banks in the more profitable areas of their business, notably foreign exchange lending.

The remaining, and newest, section of the banking sector, are the branch offices of foreign banks operating in Seoul and to a limited extent in Pusan, the second largest city. At present there are *24 fully-operative* foreign banks, while about 10 more have established representative offices, which is usually the preliminary step to seeking a full permit.

The foreign banks operate mainly in the foreign exchange loan market, with very little of *their assets or liabilities in* domestic currency. No more than 10 per cent of total deposits are held in Won, South Korea's unit of currency. The major source of funds is the overseas head offices of the banks. This accounts for about 60 per cent of operating funds, with the remainder coming in foreign exchange deposits from South Korean sources.

The foreign banks' total foreign exchange lending within *South Korea in 1978 reached* U.S.$849m. more than double the level of the previous year. In contrast, foreign exchange loans by domestic banks was $1.253m. *However, the* domestic deposit base of the local banks at the end of 1978 was Won 7,490bn more than 80 times larger than that of the foreign banks.

One of the main reasons for the concentration of foreign banks on foreign exchange *lending—apart from its greater* profitability—is the acute shortage of domestic currency they must overcome.

With such a limited deposit *base, their only access* to Won funds is by sale of securities in the market, or by availability of the swap facilities they have with the Bank of Korea for the conversion of foreign currency. As in many countries, the foreign banks have no access to rediscounting facilities with the central bank.

However, they are required to *maintain a certain range of over*bought positions in foreign currencies, and any funds above the upper limit must be sold to the central bank or Korea Exchange Bank in return for Won. So they may increase *their Won funds by building up* foreign exchange holdings, but *in the process eventually supply* more lendable foreign exchange to the rival official banks.

Guidance

Even in their foreign exchange lending the foreign *banks are strictly controlled.* They are subject to the foreign exchange requirement programme established yearly by the government to regulate the use to *which foreign funds are* put. The programme channels foreign funds into areas which are deemed to have high priority in the development of the national economy.

Therefore all areas of retail *banking in South Korea are sub*ject to a very large degree of government direction or "administrative guidance." The degree to which this is entrenched is best illustrated by the "primary banking system" which has been set up to supervise corporate lending for the past two years.

The nominated purpose of the primary banking system is to improve the financial operations of major companies by exercising systematic control over all loans supplied to them. The target companies of the programme were put into two categories: those with total bank borrowings of more than Won 5.0bn and those which were members of a business group which had total group borrowings of more than Won 10bn and which themselves had borrowed more than Won 100m.

Each year the Bank of Korea designates those companies which are subject to the primary banking system and a primary bank is nominated for each such company, plus a limited number of secondary banks. After that only a primary bank or secondary bank of a company can *provide loans to that com*pany. The target company is compelled to have one primary and perhaps six secondary banks —including foreign banks.

The primary bank must establish a ceiling on the working *capital loans to a company,* with this ceiling subject to Bank of Korea approval. In addition, the company must submit a written financial development programme to the *primary* bank every two years, which the bank must then oversee. The bank has the obligation to help a company improve its net worth by restraining dividends and approving any diversification moves or foreign borrowing.

No institution can provide loans of more than Won 500m to a target company without the *approval of the primary bank.* And, in the event that a company finds itself in financial difficulties, the primary bank will move in to devise a scheme to salvage the operation.

Because foreign banks as well as the domestic banks must participate in this system, the overall effect is to give vast discretionary powers to the Bank of Korea through the *primary banks.* And it is through financial "guidance" such as this that South Korea has been able consistently to achieve the trade and industrial development targets its planners have set year by year.

Ron Richardson

Energy

The search for oil

SOUTH KOREA'S hopes of sustaining a 10 per cent annual growth rate up to the early 1990s depend on the solution of two external problems. One is *to find enough markets for the* goods that her industry will produce. The second is to ensure stable supplies of natural resources.

The South Korean planning authorities are probably at least as worried about the *second* of these problems as they are about the first, although they seem reluctant to discuss it much in public. Within the resource sector energy constitutes the most serious area of concern, with attention focusing on the country's rapidly-growing dependence on crude oil imports.

Oil imports provided 55 per cent of South Korea's total energy needs in 1975, but were supplying 60 per cent of the total last year. A one-year-old long-term projection of the *South Korean energy picture* prepared by the Korea Development Institute (the latest material on the subject that is officially available) suggests that dependence on imported oil will reach 64 per cent in 1981 before, it is hoped, tailing off in the late 1980s.

For this to happen, however, the country will have to be successful in the various energy diversification and conservation programmes on which the government is embarking. Even if success is achieved in these fields, oil imports in 1981 will be double what they were in 1975 and will roughly double again by the early 1990s (reaching 130m metric tonnes in terms of anthracite equivalent by 1991).

South Korea's energy situa*tion could become easier if the* country discovers oil resources on its own territory. The chances of this happening depend chiefly on what happens in the continental shelf area lying between South Korea and Japan where drilling for oil should start in the not too distant future following ratification last year by the Japanese Diet of an agreement providing joint exploration and exploitation of the area.

The so-called Block Seven area covered by the Korea-Japan agreement is known to contain oil-bearing strata and, according to some private estimates, could contain deposits of about 2bn barrels. Whether oil is actually present in the area, however, will not be known until the drilling programme begins. This could be before the end of 1979, depending on how quickly Japan and Korea agree on the choice of a single operating company to conduct exploration.

If the oil search in Block Seven yields disappointing results (or, alternatively, if it is indefinitely delayed by political or other problems) South Korea will be faced over the next few years with a rapid decline in the extent to which she can rely *on domestic energy resources.* Production of anthracite coal (25 per cent of the country's total energy resources in 1977) is expected to fall gradually over the next decade, as is consumption of firewood and charcoal for domestic heating (9 per cent of total energy consumption in 1977).

Hydro-electric power generation may rise substantially over the next few years since less than half of South Korea's hydro-electric potential has been developed so far. However, the total contribution of hydro-power to South Korea energy needs is barely 1 per cent, so *that even the doubling of* capacity would make little difference to the overall situation.

The rather gloomy prospects for domestic energy resource development point, in the view *of the Korean Development* Institute, to an increase in the nation's reliance on imported energy resources from about 55 per cent of total energy con*sumption in 1977* to about 90 per cent by 1991 (assuming that the Gross National Product and the amount of energy consumed both grow at about 10 per cent per year through the 1980s).

The problem which faces *South Korea therefore* becomes one of developing imported energy resources other than oil to avoid a situation in which the nation could be held to ransom by oil producers. A second priority is to diversify sources *from which the country imports* crude oil; or, failing this, to enter into political or economic relationships with oil producers of a kind which might help to guarantee supplies.

In seeking to promote imported energy sources other than oil South Korea is placing *heavy emphasis on nuclear* power generation. The single nuclear power plant which is operating at present (the Kori 1 plant) has a generating capacity of 595,000 kW, representing about nine per cent. of total electric power generating capacity but only about 1 per cent of overall national *consumption of* energy.

Four more stations are under construction, however, and contracts are expected to be placed shortly for station number seven and eight. (These figures fail to add up because one nuclear plant project in the government's original programme was cancelled after numbers had been allotted to later plants.)

On the strength of this programme the Development Institute estimates that nuclear power may be supplying 10 per cent of South Korea's energy needs by 1986 and perhaps more than 15 per cent by 1991. The *seemingly ambitious figure* reflects the government's confidence that the development of nuclear energy will not be held up by the environmentalist opposition that has caused problems in the West (and in Japan) where the difficulty of getting local government authorities to approve power station projects has forced the government to scale down its targets severely at times).

Nuclear

Heavy reliance on nuclear power will make it necessary for South Korea to sign long-term contracts for the supply of uranium instead of relying on "spot" purchases of enriched uranium as it has done up to *now. The Ministry of Energy* says it is "working on" this matter but the first long-term contracts have yet to be announced.

Next to nuclear power, South Korea expects to rely on coal imports as the main alternative to oil. The Government is starting to think seriously about ways and means of ensuring stable and long-term supplies from producers such as Australia and the U.S. but has not yet managed to sign long-term contracts with any major supplier.

There is a wistful awareness that China would be a natural source of imported coal if political conditions permitted. With or without China, South Korea hopes that coal imports *will be meeting 17 per cent of its energy needs by 1986 and as much as 22 per cent by 1991.*

Diversification of oil supplies became a highly-sensitive topic in Seoul in the aftermath of the Iran crisis and is still a matter on which officials at the Ministry of Energy would much rather say nothing at all. Iran was the source of roughly 10 per cent of South Korea's oil imports before its oil industry ground to a halt at the end of 1978.

The National Iranian Oil Company (NIOC) also happens to be partner with the Ssangyong group in the construction of South Korea's fourth major oil refinery which had been due to begin production at the end of 1979.

The question about the *Ssangyong-NIOC project* which is bothering the Government is not whether money will be forthcoming to complete the project (almost all the necessary funds

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Trade

Exports given every encouragement

SOUTH KOREA was classified by a team of investigators from the U.S. House of Representatives Ways and Means Committee which recently visited North East Asia as one of the four "New Japans" whose export growth poses a threat to the survival of some branches of American industry. Most people in Seoul would probably view this designation as a dangerous, if flattering, exaggeration. The value of Korean exports in 1978, at $12.7bn was roughly one-eighth of the Japanese export figure, while Korea's surplus with the U.S. at $663m, was less than one-tenth of Japan's. This does not alter the fact that exports are overwhelmingly important to Korea—probably more so than to any other developing nation with an economy of comparable size.

About 35 per cent of GNP is accounted for by exports, and the percentage has been rising since the late 1960s. Inevitably, therefore, Korea's economic strategy has been one of export-led growth (in contrast to the economic growth strategy followed by Japan in the first two decades after World War Two where the growth of industry was based, first and foremost, on supplying a large home market).

Exports are scheduled to grow more slowly over the next decade or so than they have done up to now. Exports, if they fulfil the Government's target, will show a 22 per cent increase this year over the 1978 level, which in turn was 27 per cent up on 1977. The annual growth rate will slow to 14 per cent in the early 1980s and 12 per cent in the later 1980s, but even at this rate Korea would still be increasing its overseas trade at roughly double the expected world average. In the period from 1965 to 1977 Korean exports grew at an average annual rate of 40 per cent.

One reason why South Korea's exports have grown so fast is that they started from a very low base. In 1963, the year that the present regime came to power, overseas sales were worth a mere $87m. Even today Korea's exports on a per capita basis are less than half those of Taiwan (a little over $200 compared with over $500) and only about one-eighth of typical European levels. Starting from a low base, however, does not provide the full explanation for Korea's subsequent export achievement.

In a closely regulated economic system the Government has done everything possible to "make exports fly" as one U.S. banker puts it. This includes setting export targets for the economy as a whole and for individual overseas markets; encouraging industry to sell its products at lower prices overseas than those charged at home; and ensuring a supply of cheap export credit (currently available at a basic rate of 9 per cent per year compared with the standard rate for commercial loans of around 22 per cent).

Another Government device to promote exports has been the creation of General Trading Companies on the Japanese model. These are set specific sales targets and in return enjoy certain financial and administrative privileges—besides the prestige of the much coveted "GTC" label.

The main threat to the further rapid growth of Korean exports is the rise of protectionism in western markets—a problem about which the Ministry of Commerce and Industry, which has direct responsibility for seeing that export targets are met, claims to be very worried indeed. The U.S., which is Korea's largest market (taking 31 per cent of exports in 1977), maintains restrictions on Korean textiles, footwear and colour TV sets, while Japan restricts silk products, leather footwear and many different varieties of fish. European countries maintain a patchwork of restraints on the import of Korean products, ranging from textiles to black and white TV sets (in the UK), watches, radios and semi-conductors (France).

Korea's strategy for dealing with protectionism is four pronged. In the short term it aims to increase the value-added content of restricted export items so as to earn more money within a given export volume. (Korea's trading partners claim it also shows considerable skill in exploiting loopholes within export restraint agreements, but this, naturally enough, is not part of the officially admitted strategy for dealing with the problem.)

A second way in which Korea hopes to prevent protectionism from damaging its exports is by shifting the pattern of its trade from light industrial to heavy industrial goods. Textiles, clothing and footwear, which accounted for nearly 50 per cent of Korea's total exports in 1976, are expected to be downgraded by the late 1980s to about a 20 per cent share, while the general category of machinery exports should increase from 15 to nearly 50 per cent of the total.

Korea is already beginning to promote exports of simple industrial plant such as cement and sugar refining equipment (these may be worth as much as $1bn this year, according to the Ministry of Commerce and Industry, compared with the 1978 figure of around $320m.) It is recognised, however, that the switch from labour-intensive, low technology light industrial exports to capital and skill-intensive heavy industry products will pose a serious challenge. Meeting the challenge will involve a massive import of technology (from Europe, the U.S. and Japan), as well as a shift of emphasis from short-term export financing of the kind now provided at preferential rates by the Korean banking system to medium and long-term export financing.

The third "leg" of the Korean Government's strategy for fighting protectionism involves a search for new markets. This is not a new priority as can be seen from the fact that export dependence on the U.S. has fallen from over 50 per cent in 1968 to just over 30 per cent today. (Similarly Japan now takes only 21 per cent of Korea's exports, compared with 38 per cent as recently as six years ago). Korea has been successful in stepping up exports to the Middle East (mainly in the form of materials for the spectacular series of contracts won by the Korean construction industry) and is now looking hopefully at Latin America.

The Government has begun to show strong interest in the development of trade relations with China, which is regarded as both a natural market for Korean products such as steel and cement and fertilisers, and as a natural supplier of fuels and raw materials, notably coal and oil. China, however, has shown no sign of wanting to do business with Korea. The possibility of instituting "indirect" trade between the two countries with Korean products being shipped via Hong Kong or Singapore is being considered in some quarters, but even this appears to be a non-starter for the time being. Japanese trading concerns, which might well act as intermediaries in such business, take the view that China will not embark on trading relations of any kind with Korea until it has succeeded in its current campaign to establish trade links with Taiwan.

The Government's last weapon against western protectionism is the paradoxical one of liberalising Korean imports. Korean industry was heavily protected against imports up to some two years ago (and is still extremely well protected in a number of sensitive areas such as motor manufacture). A programme of liberalisation, however, got under way officially in 1978, with the result that the Government now claims that 68 per cent of Korean trade has been liberalised on an item basis. Another round of import liberalisation is due in 1979 and more will follow in the early 1980s, bringing the degree of liberalisation (again on the official basis of the number of items freed) to over 90 per cent by the mid-1980s.

The fish market at Pusan. Fish products are among a long list of Korean exports that are finding difficulty in overcoming restrictions in overseas markets.

Proud

The Koreans are proud of the fact that they have acted "spontaneously" in starting to free their exports (unlike Japan, which had to be pushed into import liberalisation by external pressure). They hope that freeing imports will not only combat internal inflation and increase the competitive strength of Korean industry (the main economic argument in its favour) but also put Korea in a strong "moral" position vis-a-vis trading partners who are thinking of planning further restraints on Korean exports.

A snag about the liberalisation programme, to which the Government appears to be highly sensitive, is that too fast a removal of barriers could increase the flow of Japanese goods to Korea, at the expense of less competitive exporters such as the EEC. The current system, under which quotas are allocated to individual countries, enables the Japanese export drive to be kept within bounds. Import liberalisation served to increase Korea's visible trade deficit substantially last year, but this was in line with the Government's overall policy of running a moderate current account deficit and balancing it with capital imports.

Korean exports face one other threat to their continued growth apart from the refusal of foreign markets to admit Korean goods. This is the rapid and continuing rise of Korea's own manufacturing costs and the apparently insatiable demand from the local market for the products of Korean industry. Car exports have grown less rapidly than was at one time expected because of the huge backlog of domestic demand, while exports of cement and of certain food products had to be suspended altogether during much of 1978 in order to keep the home market supplied.

The Ministry of Commerce and Industry cites supply shortages as one reason why Korean exports started 1979 at rates well below the levels needed to reach the target for the year, while imports were running at levels much higher than called for by the target. The Ministry also claims to be concerned about an overall cost differential of around 20 per cent between Korea and Taiwan in the manufacture of light industrial goods. Such facts provide a corrective to the alarmist view that Korean exports are poised to "take over" western markets. They do not mean that the Korean export drive is about to run out of steam.

C.S.

SOUTH KOREA'S FOREIGN TRADE, $M.

	1965-69 average	1970-74 average	1975	1976	1977	1978	1979
Exports	382	2,295	5,003	7,815	10,046	12,716	*15,500
Imports	912	3,304	6,674	8,405	10,485	14,524	*18,000
Balance	−530	−1,009	−1,671	−590	−439	−1,808	−2,500

* Target.

Search

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have already been disbursed) but whether NIOC will be able to fulfil an undertaking to supply the refinery with oil. If it fails to do so Korea will find itself in the awkward position of having to look to another producing country or to the international majors to cover the shortfall.

Problems with NIOC could cause the Government to think twice about the wisdom of developing the refinery industry on the basis of joint ventures between local business groups and State-owned oil companies of producing countries. Another project of this kind, involving the Hyundai group and Pertamina of Indonesia is already on the stocks, however, and seems likely to go ahead whatever the fate of the NIOC-Ssangyong venture.

Korea's heavy dependence on crude oil imports as an energy source has caused problems for the Government's price stabilisation campaign, besides constituting a worry in the longer-term future. The direct impact of recent increases in crude oil prices on the wholesale price index this year is estimated at 1.04 per cent while indirect effects are put at another 0.52 per cent.

These price effects have driven home the need to find some means of insulating the economy from fluctuations in world oil supplies, but there is no indication that Korea has an answer to a problem which has baffled almost all the industrial nations.

C.S.

SOUTH KOREA'S ENERGY NEEDS
(units in thousand metric tons of anthracite equivalent)

	1975	%	1981*	%	1986*	%	1991*	%
Domestic energy supplies:								
Hydroelectric	655	1.2	987	1.0	2,127	1.3	2,127	0.8
Anthracite	15,945	29.5	20,258	20.4	23,364	14.5	20,670	7.0
Wood and Charcoal	6,706	12.4	4,548	4.6	3,034	1.9	1,719	0.7
Total	23,306	43.1	25,793	26.0	28,525	17.7	24,516	9.4
Imported energy supplies:								
Oil	29,733	55.0	63,733	64.2	88,790	55.0	130,113	50.0
Gas	—	—	—	—	—	—	7,885	3.0
Coal	1,010	1.9	7,964	8.0	27,705	17.2	57,089	22.0
Nuclear	—	—	1,730	1.8	16,416	10.1	40,623	15.6
Total	30,743	56.9	73,472	74.0	132,911	82.3	235,710	90.6
Grand total	54,049	100	99,265	100	161,436	100	260,226	100

* Estimated. Source: Korea Development Institute

Agriculture

Planning pays off

KOREAN FARMERS have come a long way from traditional despondency in recent years, and are now faced with the new challenge of adapting themselves to a fast-industrialising society.

The country is now self-sufficient in rice, the staple food, the income gap between agriculture and industry has been substantially narrowed, and rural living conditions, including the provision of electricity, have been greatly improved.

But to keep up with the growing demands for meat, milk and vegetables, and to cope with a continuing drain on the farm labour force as a result of the country's rapid industrialisation, the Government is actively promoting the transfer to a new concept of farming.

Until the mid-1960s, South Korea, a traditionally agrarian society, had been suffering from chronic poverty on the farms. Every spring the farmers went through a period of hunger before their barley crop was harvested. The rice paddies were so poorly irrigated that they were mostly at the mercy of the weather. More than a third of the rural families, which accounted for 56 per cent of the entire population, were forced to subsist on farms less than 0.5 hectares each in size. To help feed its overcrowding population, the country had to import large quantities of rice and other food grains every year under the U.S. aid programme.

The fundamental problem was the limited amount of the nation's arable land—less than a quarter of the entire territory.

When the Government of President Park Chung Hee initiated a series of five-year economic plans in 1962, the agrarian sector was virtually ignored, while emphasis was placed on industrial development. But beginning with the third five-year plan which started in 1972, increasing attention was paid to agriculture, making rural development one of the plan's chief goals. Top priority was given to increased production of food grains, especially rice, which represented nearly a half of total food consumption by weight.

In 1975 the country succeeded in reaching self-sufficiency in rice, in 1977 an unprecedented 15.2 per cent increase in rice production was achieved, that year's total of 6m tons rice production moving from an average yield of 4.94 tons per hectare—the world's highest figure, topping even neighbouring Japan.

This success in boosting rice output is attributable in the main to the cultivation of high-yielding local strains—tongil, yushin and miryang. The new varieties covered 70 per cent of the paddy fields last year, and this year, is likely to be 76 per cent.

Improved irrigation has also contributed to the increased rice production, as has better use of fertilisers and the widespread use of agricultural chemicals.

Apart from rice, South Korea has achieved self-sufficiency in barley, another important food grain. But the overall domestic grain supply was 25 per cent short of requirements because only negligible quantities of wheat and corn are cultivated at home. Wheat is an uneconomical crop in Korea because of its long growing season, which prevents the double cropping that is possible with rice.

Factor

Another important factor behind the increase in rice output has been the Government's price support policy, which is responsible for purchasing substantial amount of rice and barley from farmers upon harvest every year at higher prices than it sells them to the consumer.

Although the accumulating budgetary deficit accruing from the price support programme has recently led to a call for its abolishment, the Agriculture Ministry intends to continue it for several years, if only for rice alone.

Ministry officials emphasise that the price support is vital in narrowing the disparity between urban and rural earnings, which is certain to widen again as industrial wages are increasing fast.

The Government is now encouraging farmers to increase their off-farm earnings, since there is a limit to rises in farm income. Although non-agricultural income—such as that from off-season work at factories—rose to 28 per cent of the farmers' total annual earnings last year, it was still inadequate. The Government aim is 50 per cent by 1990. To this end, it is pushing ahead with a programme to disperse industrial plants to rural areas: results so far are not satisfactory.

Another major problem facing Korean agriculture is the growing shortage of labour due to the continued migration to the cities. The rural population, which accounted for 55 per cent of the national total in 1965, was down to 31 per cent in 1978, and is forecast to decline further to 20 per cent by 1991.

As a result, the proportion of agriculture workers in the total working population dropped from 63 per cent in 1963 to below 40 per cent last year. What makes it worse is the fact that most of the city-bound migrants are young people.

The Government sees gradual mechanisation of farming as the only solution to this problem. To promote mechanised farming, the National Assembly last year passed a special law providing financial assistance in the form of low-interest loans to farmers in buying farm machines.

But given the small size of unit farms, less than a hectare per household, and the irregular shapes of paddy fields (only 18 per cent of which have been rearranged into regular patterns under a Government programme), mechanisation is still far off. At present, as the principal farm machine there are 210,000 locally produced small power tillers—one for every 10 households. The government plans to increase their number to 500,000 by 1986. Meanwhile, it will also increase rice transplanters and harvesters (which are rare now), to 120,000 and 60,000, respectively.

Another new direction for Government's agricultural policy is the promotion of the livestock industry to meet the fast-rising demand for meat and dairy products. Last year, for the first time, beef and mutton had to be imported, mostly from Australia. This year, meat imports are expected to increase to 72,000 tons, costing about 140m won.

The Government is extending loans and tax benefits to encourage livestock and dairy farming. There are a number of constraints, including vast amounts of investment needed to develop pasture land on the hillsides which abound in Korea and the need to import most of the required feeds. Nevertheless, the Government has a long-range plan to increase the population of imported beef cattle from the present 47,000 to 726,000 by 1991 and dairy cows from 194,000 to 358,000.

One unique feature of Korean rural progress is Saemaul Undong, the new community movement, launched in 1970 at the initiative of President Park. An integrated rural development campaign with the concepts of "diligence, self-help and co-operation," it has been instrumental in galvanising the farmers into improving their living environment and productivity, then raising their incomes. Elected village committees select projects, which are implemented chiefly by voluntary labour with some Government assistance in the form of cash and building materials.

Saemaul Undong started with such simple projects as improvements to roofs and drains; moved on to infrastructure projects, including farm roads, small bridges, electricity and piped water; and then to income supplement projects such as joint livestock raising and sericulture. Its latest project is intervillage co-operation for regional development. The movement has now extended to urban neighbourhoods and factory workers to mobilise the entire nation in self-help projects at the local level.

Samuel Kim

Foreign investment

The rush slows down

FOREIGN DIRECT investment, which was once attracted into South Korea by the low-cost labour supply, still continues to flow in now chiefly because of the rapidly growing local consumer market. For the third consecutive year foreign investment arrived at an annual rate of around $100m in 1978. This year's Government projection is for another $100m.

Since the Government began encouraging foreigners to make equity investments in 1962, when a series of five-year economic plans began, a total of just over $1bn has been approved in 891 cases; $873m had actually arrived by the end of 1978.

When the Government decided to open the door to foreign investment as a means of financing its ambitious economic development plans and introducing technical know-how, the major attraction Korea could offer was a cheap labour market. There was an abundance of literate, hard-working, easily trainable and dextrous labour available at $30 a month starting wage.

After South Korea normalised relations with neighbouring Japan, its former colonial overlord, in 1965, there began a sudden rush of Japanese investors into the country. Most of the Japanese investments were for producing labour-intensive goods such as textiles for export to Japan and other countries.

The Korean Government then enacted a special law governing the introduction of foreign commercial loans, equity investments and technological know-how. The law, still in force, provides for a five-year tax holiday followed by three years 50 per cent tax reductions to foreign investors. It also guaranteed the unlimited remittance of dividends or profits and the repatriation of principal after two years of operation. It was described as one of the most liberal foreign investment laws in the world.

Benefits

The tax benefits, which apply to both corporate and personal incomes taxes, customs duty, property tax and acquisition tax, were attractive enough to induce investments by Americans. Their money went mainly into the labour-intensive electronics assembly plants and such chemical lines as fertiliser manufacturing and oil refining.

In the league table of countries Japan came first with 59 per cent of all foreign investment approvals by the Korean Government in terms of cash, totalling $584m in 665 operations. The U.S. followed with $194m in 116 projects which accounted for 19.2 per cent.

Among the Europeans, the Dutch have the largest investments in Korea—$73m covering four cases. They include a joint venture petrochemical project by Dow Chemicals of the Netherlands. West German investments total $19m covering 18 cases, French $11.3m (five cases) and Swiss $12m (seven).

Investments by British companies amount to $11.6m in five projects. They include $5.6m by Hill Samuel for a 50 per cent equity stake in a merchant bank; $4.1m by Lazard Brothers, also for 50 per cent interest in another merchant bank; $1,050,000 by Lucas CAV for 70 per cent ownership of a plant manufacturing nozzles for diesel engines; $600,000 by Spirax Sarco of Cheltenham, Gloucs., for 60 per cent share in a steam controller manufacturing plant; $208,000 by Foseco Minsep of the Midlands in a factory producing chemicals for foundry and steelmaking.

The last three are in joint ventures with Korean partners to produce and market their products locally. "We came here in order to get into the Korean market, which we found is large, growing and buoyant," explained Christopher J. Ball, president of Spirax Sarco Korea.

His company plans to start producing in June at its plant in Bupyong, just outside Seoul. It hopes to export to other Asian countries from next year.

A. C. Wyatt, project manager of Lucas CAV overseas operations who is helping set up the CAV Korea plant in Changwon on the south coast, expressed a similar view. "As a multinational company, we had been looking for an opportunity of building a plant in Asia and saw in Korea the potential of future growth," he said.

Both Mr. Wyatt and Mr. Ball said that labour supply is no problem in Korea, but except for manual workers, labour is no longer so cheap.

A machine operator should be getting the equivalent of $350 to $400 a month, compared with a corresponding equivalent of $550-$600 in Britain, while the salary for middle management people, $750 to $800 a month including bonus and other fringe benefits, is about the same as in Britain.

Government officials maintain that the average wage level for semi-skilled workers in Korea is still a little lower than in Hong Kong and Singapore and about equal to or slightly above Taiwan rates. Thus Korea seems to be fast losing its once large edge over other Asian countries as the cheap labour market for foreign investors: this is the result of successive 20-30 per cent wage increases in recent years.

This is reflected in the sharp decline of new investment in labour-intensive industries. Indeed the Government no longer approves foreign investment in textile industry because Korea's existing mills have trouble keeping up their exports because of quota restrictions by major importing countries.

According to Mr. Kang Shin-Joe, director general of the Bureau of Foreign Investment Promotion, the Government welcomes the following projects:

- Large-scale complex projects, such as metals, machinery and electronic equipment, which require high level of technology;
- Export-oriented projects which will contribute to exploring overseas markets;
- projects which contribute to the development and effective use of domestic resources;
- Import substitution projects.

Mr. Kang said the latest trend is investment in food processing, and in heavy industries such as chemicals.

This year CPC International of the U.S. invested in a joint venture to produce snacks and instant noodles, Nestle of Switzerland in a joint project to produce baby foods and high protein foods, and the Lotte confectionery group of Japan in a milk and meat processing venture.

Brown Boveri of Switzerland is known to be negotiating with Seoul's Daewoo group for a joint venture to manufacture power plant facilities, and Babcock of West Germany for a project to produce power plant boilers. Volkswagen of West Germany is reported to be seeking a Korean partner for production of small cars. Imperial Chemical Industries and Dunlop of Britain are also said to be looking into investment possibilities.

Although there is no legal limit to the share of foreign investors in an enterprise, the Government allows, in principle, up to 50 per cent equity. In the following cases, however, majority or 100 per cent foreign ownership may be authorised:

- Projects entirely export-oriented and at the same time contributing to raising the technological level of the particular industry;
- Projects with imported technology that is highly sophisticated and needed by the economy;
- Projects by multinational corporations that are permitted 100 per cent ownership in other countries because of their exclusive production techniques, business operations including market control on a global basis, or patent rights;
- Investments that are beyond the capabilities of local firms, because of capital requirements, technological sophistication or market opportunities;
- Investments from the countries with little previous participation in Korean economy.

The minimum amount of foreign equity investment authorised is $200,000, but for electronics and machinery industries is reduced to $100,000. In the industrial engineering field $50,000 is the minimum requirement.

South Korea does not permit any portfolio investment in the stock market by non-resident foreigners. Even for residents no profits can legally be repatriated out of the country.

Samuel Kim

On the last four pages of this Survey IAN HARGREAVES, who has recently visited South Korea's major industries, outlines the country's industrial strategy and looks in greater depth at individual sectors.

A second industrial revolution

SOUTH KOREA is now in the process of bringing about its second industrial revolution within 20 years.

The first revolution involved dragging a war-ravaged country, lacking raw materials and with an economy based on primitive agriculture, to a semi-industrialised condition. That meant using cheap labour to develop light industries, notably textiles, and the simpler ends of the consumer electronics and metal fabrication industries.

Hardly had the country adapted to its success in selling goods such as cutlery, clothes and televisions before its economic theorists and industrial planners started to argue that Korea must rapidly start to reduce its dependence upon the light labour-intensive industries upon which its success was based.

There are three main reasons for this decision: the awareness that Korean labour is rapidly pricing itself out of the cheap assembly market (wages costs rose by over 30 per cent in both 1977 and 1978); the growing protectionist restrictions in advanced countries against high volume and low added value goods; and the feeling that competition from other developing countries will be less keen in more technology-intensive areas. The strategy is for the heavy and chemical industries to account for 65 per cent of manufacturing output by 1991, compared with 48 per cent last year, and for light industries to decline from 52 per cent to 35 per cent.

Some of the implications of this policy are already apparent: for example, the emergence of Korea's motor and shipbuilding industries; but many features of the strategy are far less well defined and less easily described.

What Korean planners call the "machinery industry," the subject of four promotion plans in the last eight years, is only now moving from the planning to the operational stage. The heart of the development is the Changwon integrated machinery complex near Buson, where the dust is still settling on the 51 plants already complete, but where another 150 factories remain to be built.

These factories have already started to turn out machine tools, construction equipment, boilers, nuclear power station components, railway rolling stock, motor components, transformers, turbines, cranes, bearings; indeed, anything and everything in heavy industrial production, involving a growing number of technology-licensing agreements and, less frequently, joint ventures with advanced countries. Last year the machinery industry entered into 104 cases of technological inducement out of a total of 255 in Korea (there were 42 electrical agreements and 38 petrochemical—the other key developing areas). In spite of the Koreans' urgent desire to strengthen their links with Europe at the expense of Japan, well over half the technology deals were with Japan and another 49 with the U.S. The Koreans want to make this switch partly to reduce their trade deficit with Japan but also to improve relations with Europe on the protectionist front and because some companies feel the Japanese have sold them outdated technology of limited value in export markets.

So far the development of the machinery sector is very uneven. But it is already clear that it will be dominated by seven companies, which by 1981 are expected to have aggregate sales of $6.1bn in this field and account for 60 per cent of the industry's output. They are Hyundai Heavy Industries, Hyundai International, Daewoo, Samsung, Daehan, Kangwon, and Hyosung.

Impressive progress has already been made in areas such as railway rolling stock, where Hyundai has recently joined Daewoo in contention for both substantial domestic orders and exports, which the Korea Development Institute expects to reach $100m by 1991. Hyundai is reported to be close to a significant export deal with Greece, and at home, the industry is now almost self-sufficient, with the help of foreign technology.

Output of heavy electrical machinery (generators, transformers, motors, etc.) reached $222m last year, still signifying a small industry, but twice as large as the year before. More important from the Korean point of view, exports and imports were roughly in balance: in other words, in the heavy electrical sector Korean industry is in a position to meet domestic needs.

Imports

In some other areas, this is far from the case. For machine tools, the country relied on imports for over 65 per cent of its needs last year, and outside the simple lathe sector the dependence on foreign goods was even higher. In chemical and construction machinery, domestic needs have grown so fast that the level of self-sufficiency has actually slipped back from 37 per cent and 9.5 per cent in 1974 to 17.8 per cent and 7.3 per cent last year. On the other hand, Korea already has a healthy surplus in the agricultural machinery trade.

The Government's goal is to achieve an overall level of self-sufficiency of 70 per cent by 1981 in preparation for a major export assault in the fifth five-year plan starting in 1982. It is interesting in this context to note the general policy of Korean industrialists, even where their export base is tiny, in spreading their products into as many markets as possible in order to gain maximum experience and to prepare distribution and marketing arrangements. Hyundai Motor is not untypical in exporting to more than 40 countries.

There are huge problems to overcome if this and other industrial targets are to be met. In the short term a major difficulty is the shortage of investment funds in Korea because of the Government's anti-inflationary tight-money policies. Korean businessmen are used to high interest rates (18-20 per cent), but everyone is complaining about shortage of funds at the moment and some companies are talking of cutting back development projects by as much as 30 per cent this year if the reins are not eased. The shortage of working capital has also aggravated an always tight position in relation to component stockholding, which is an important reason for many industries' shortage of key raw materials in the early part of this year.

More underlying problems are the shortage of skilled labour, in spite of a recent decision to increase post-high school college places by 40 per cent last year. Employers are no longer able to count on a thick pile of applications for every vacancy, and in an area like Changwon the high demand for new labour is a big anxiety for some companies. This shortage of labour is also the reason for high wage inflation as employers fight to retain staff. Contrary to the Japanese model, labour turnover in Korea is high—3-4 per cent a month, according to the Economic Planning Board. Even so, the typical male industrial wage is still only between $250-$350 a month, including bonuses. A function of the shortage of skilled technicians and scientists is the still inadequate level of spending on research and development—less than a quarter of that in European countries and something the planners know they must reverse quickly to underpin the industrial strategy.

Coupled with general worries about the price of oil and the sluggishness of the world economy, there is much to suggest that the second stage of Korea's industrial transformation will be harder to achieve than the first.

In pursuing its objectives, the Government's weapons are an armoury of import protectionism in the form of high tariffs against unwanted items (although the theorists of the planning Board are adamant that Korea is moving to an open and liberal trading pattern, more like that of Sweden than that of Japan), cheap loans for companies investing in preferred sectors, tax incentives and measures to encourage the inflow of foreign technology.

But probably more significant than all of these specific measures is the fostering of the nation's economic and industrial consciousness through, among other means, the Factory Saemaul (new community) movement. This campaign, modelled on an earlier successful drive to get farm labourers to work harder and more co-operatively, has, according to company directors, produced dramatic improvements in labour productivity, in return for which companies have invested heavily in welfare and recreational facilities for their staff.

Saemaul is an important part of a set of national attitudes, stemming from the common desire to be economically superior to North Korea, which has so far kept South Korea free of labour troubles. Although a classically capitalist economy, great effort is expended by the Government in preventing ostentatious display of wealth (it is common for plant managing directors to wear the same uniforms as their operatives) and in attempting to reduce income differentials.

"We are working for the next generation," is probably the most common philosophy one hears expressed in South Korea and it explains the willingness of most to accept the six or seven day week of 10-12 hour days. It remains to be seen whether the sheer effort and determination which has got Korean industry through its first stage of advance will be sufficient to power it through the second.

KOREAN INDUSTRY: MAIN GOALS FOR 1986 (TOTAL EXPORTS $50bn)

	Target	Intended world ranking
Steel:	20.6m tonnes capacity	10
Shipbuilding:	Annual capacity of 6.5m dwt	5
Motor industry:	Annual capaity of 2m units	9
Petrochemicals:	Annual capacity of 1.5m tonnes of ethylene	10
Electronics:	$9bn exports and 85 per cent localisation of product components	5
Textiles:	$10bn exports, 10 per cent world market share	1
Ceramics:	$500m exports	5
Machinery:	$10bn exports	
Cement:	Annual capacity of 40m tonnes	6
Non-ferrous metals:	Self-sufficiency in copper, lead zinc and aluminium ingot	

MACHINERY INDUSTRY: IMPORTS AND EXPORTS IN 1978 ($m)

Sector	Production	Imports	Exports
General machinery	961	1,230	155
Electrical machinery	2,281	871	973
Transport equipment	1,459	374	517
Precision machinery	221	131	146
Total	4,922	2,606	1,791

Figures include shipbuilding and electronic products.
Source: Korea Society for the Advancement of the Machine Industry.

Textiles

Still a major force

SOUTH KOREA'S industrial leaders have a habit of referring to their textiles industry as if it were in a state of decline—the glory of a former light-industrial age soon to be forgotten in the present generation's move into heavier and more technology-intensive sectors.

This is misleading. In 1978, textiles exports accounted for 31 per cent of the country's total sales of goods abroad. At $3.98bn, the industry's export sales remained Korea's biggest foreign exchange earner and the key provider of capital for diversification into heavy, capital-intensive industry. It also employed 20 per cent of the workforce.

As the table shows, the Government expects the industry to continue growing, doubling the value of its exports in real terms between 1978 and 1991. The industry's own assessment, as disclosed by the Korean Federation of Textiles Associations, is to export goods valued at $6.5bn (at current prices) in 1981 and $10bn in 1986.

In that year, if the Government's next five-year plan unfolds as intended, Korea will be exporting $50bn-worth of goods. So the textiles share will be down to 20 per cent of that total but, according to the association, the volume of textile exports will still have lifted Korea from sixth place in the world industry rankings to number one with 10 per cent of world textile exports. Some decline.

The reason for the sense of decline, which is strongly felt in the important long-range study of South Korea's economy to 1991 published last year by the Korea Development Institute, is the feeling that with wage cost inflation running in excess of 30 per cent a year, Korea is soon going to be outperformed in labour-intensive industries such as textiles.

In particular, it is felt, Republican China, whose textile industry costs are thought in Korea to be at least 65 per cent lower than its own, will emerge as an industry leader, initially in natural fibre products and then in synthetics.

Another reason for expecting poorer performance is the very great anxiety felt in Korea, especially in the textiles and electronics industries, at the growth of protectionism in Western markets. The EEC is limiting Korean textile imports to a 6 per cent annual growth rate and the U.S. to 6.5 per cent. The industry says it could comfortably expand at double this rate in these markets if permitted.

But the South Koreans are realists. They do not believe the restrictions will be eased, although they argue keenly (more in electronics and motor cars than textiles) that they should not be punished for the sins of Japan. Their response to the restrictions is to move into industries where restrictions do not exist.

That said, the Korean textile manufacturers have carefully-laid plans for continued growth in spite of protectionism and in spite of rising wage costs. That strategy involves switching to higher quality and higher added value goods in restricted markets and pushing more volume into unprotected markets.

Last year, quota-area countries took 49 per cent of Korea's textile exports ($985m to the U.S. and $735m to the EEC) and of the $2,011m-worth of goods sent to unrestricted markets, Japan accounted for $1,040m. That, the South Koreans believe, indicates that plenty of room remains in other developing-country markets. The Middle East is of growing importance.

This year, garment manufacture will account for 63 per cent of exports, in 1986 for only 50 per cent, with fabrics taking 37 per cent and yarns 13 per cent. Fabrics then, and principally synthetic fabrics, represent the real growth sector.

The preference for a future emphasis more on chemical than natural fibres is also based on the relative economics of the Korean industry compared with other developing countries. All of Korea's wool and cotton are imported, whereas Korea's growing chemical industry (described elsewhere in this survey) means that textiles companies will not be in the position for much longer where the chemical fibre manufacturers rely on foreign suppliers for 70 per cent of their AM monomer, 60 per cent of front caprolactam and all of their TPA.

South Korea's industrial planners feel certain that the days when the country's industrial economy could work merely by rapidly processing for re-export the raw materials of others are rapidly vanishing.

The synthetics sector of the Korean textiles industry is also its most modern. In the worsted/cotton companies, 30,600 spindles (almost 1 per cent of the total) are over 20 years old, which is twice the accepted level of durability. In 1976, 31 per cent of spindles and 35 per cent of looms in the cotton industry were over this 10-year limit and the situation is thought to have improved little since then. Cheil Wool Textile, part of the Samsung group, says the average age of its spindles is seven-eight years and the company is now engaged in a five-year modernisation programme.

Cheil, biggest of the 27 wool textile companies in Korea, with about a 45 per cent market share, provides an interesting counter trend to the general strategy of the industry's move away from garment production. Cheil is still expanding fabric production, but is also starting to make garments with the aim of this sector accounting for 40 per cent of its $400m projected sales in 1983.

Mr. S. B. Lee, the company's president, admits that the requirement for an extra 35,000 workers, mainly women, in the next five years is rather daunting in the current Korean labour market. The company's reasoning is that, tied to restricted U.S. and European markets for 60 per cent of its woollen and worsted business, garment manufacture, with the right attention to fashion, offers high added value opportunities.

One market which does look good for the South Korean manufacturers is their own. Rapidly rising real incomes mean that per capita consumption of textiles in Korea, which has risen 13 per cent in the last two years, is expected to double again in the next eight—to 16.7 kilogrammes per head in 1986. This is equivalent to the level of UK textiles consumption in 1973. The result is that by 1986, 43.5 per cent of the South Korean industry's output should be sold in its home market, compared with 33.4 per cent this year.

PRODUCTION AND CAPACITY OF MAIN TEXTILE PRODUCTS

Product	1976	1977	1978	1981	1986	1991
Chemical fibre						
Annual production (000 tonnes)	354	395	483	736	1,033	1,352
Capacity (tonnes per day)	1,010	1,130	1,380	2,100	2,950	3,860
Self-sufficiency ratio of fibre output in synthetic textile industry (%)	82	82	85	90	95	98
Nylon F						
Production (tonnes)	71,800	82,600	98,500	147,000	206,000	269,000
Capacity (tonnes per day)	1,010	1,130	1,380	2,100	2,950	3,860
Polyester F and SF						
Production (tonnes)	133,800	158,000	205,300	314,000	440,000	575,000
Capacity (tonnes per day)	380	450	590	900	1,260	1,640
Acrylic SF						
Production (tonnes)	102,000	107,300	105,800	182,000	255,000	333,000
Capacity (tonnes per day)	290	310	360	520	730	950

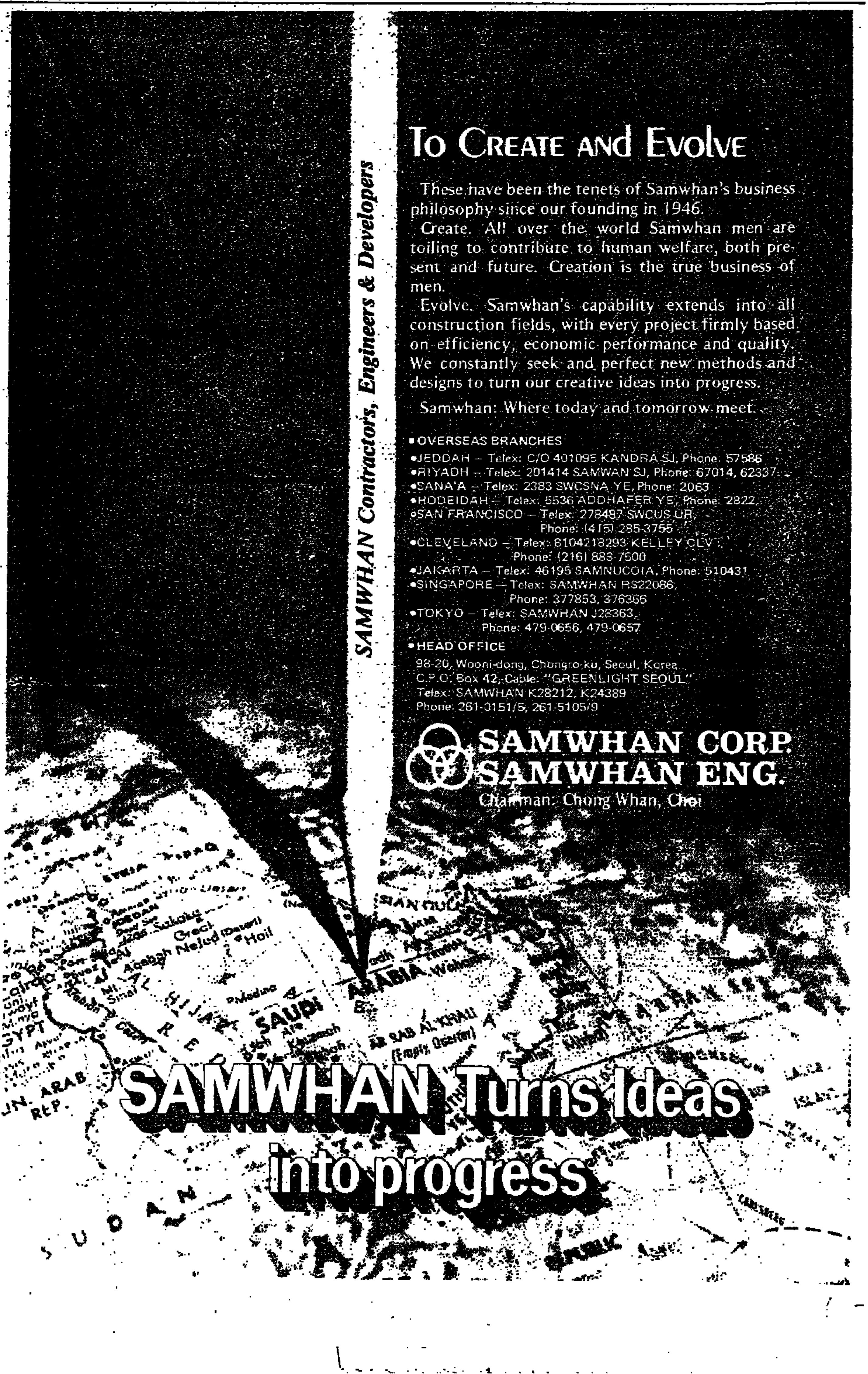
Source: Ministry of Commerce and Industry—latest estimates.

KOREAN TEXTILE EXPORTS 1976-1991

	1976	1977	1978	1981	1986	1991
			(000 tonnes)			
Natural fibre	140	140	222	247	300	366
Man-made fibre	258	302	367	469	611	794
All fibres	398	442	589	712	911	1,160
	1976	1977	1978	1981	1986	1991
			($bn 1975 prices)			
Total value of exports	2.74	2.9	3.56	4.86	6.1	7.3
Fibre and yarn	0.28	0.33	0.38	0.52	0.77	1.4
Fabric	0.66	0.68	0.99	1.31	2.28	2.92
Finished garments	1.8	1.89	2.19	2.77	3.05	1.46

Share of product category in total exports	1978	1991
	11%	20%
	28%	40%
	61%	20%

Source: Ministry of Commerce and Industry—latest estimates.



Steel

Public ownership debate

PUBLIC DISAGREEMENT between businessmen and the Government is still rare in South Korea: a country characterised by a remarkably high degree of unanimity about national economic and social objectives.

But there was an exception in the closing months of last year, when the country's three largest industrial conglomerates, Daewoo, Samsung and Hyundai, all made it clear with varying degrees of vociferousness that they would like permission to undertake the construction and operation of Korea's second integrated steel mill.

In the end, the Government ignored their bids and said that the number two mill, like number one, would be owned and operated by the Pohang Iron and Steel Company (POSCO), a company formed in 1968 with a 50 per cent Government stake and 50 per cent from a mixture of banks.

The Government was, of course, only following a general steel industry trend for public ownership of what is a highly capital-intensive industry, besides reiterating its confidence in the ability and experience of POSCO, which even the rival conglomerates agree produces steel of acceptable quality.

There were many reasons for the private sector wanting a major stake in the future of Korea's steel industry. One is the industry's profitability, with POSCO returning a net surplus of $40m last year against $33m in 1977; a second is the attractiveness to these conglomerates, which are all heavy steel consumers, in having guaranteed supplies at controllable cost and quality.

But a more general and underlying feeling among the big industrial groups is that the Korean Government is being too cautious about steel and ensuring by its caution that the country will remain a net importer of steel for the foreseeable future.

In its plan for the second mill, the Government has responded to this criticism by firmly committing itself to an enlarged target of 12m tonnes a year capacity for the facility, which is virtually certain to be built at Asan Bay on the West coast of the peninsula. The 3m-tonnes a year first stage, which is estimated to cost $2bn, is due to start operation by 1984, and it will be financed by a mixture of POSCO'S retained earnings and foreign credit associated with purchases of equipment from overseas. There is no indication yet whether POSCO will rely on the same Japanese and Austrian technology upon which it based its initial integrated mill, but in view of the fact that subsequent stages of the first mill have involved large contracts with other countries, the field would appear to be open for the new project.

In the private sector, the rebuff over the second steel mill has not deterred the big companies from moving forward. ICC, which is one of Korea's 13 general trading companies, last year took over Union Steel, whose 0.7m tonnes of crude steel output last year made it the largest private sector steelmaker. In the same year, Hyundai bought the small Inchon Iron and Steel company, and Kumbo, another general trading conglomerate, took over Kukdong Steel. Hyndai plans to increase the output at Inchon from 380,000 tonnes to 1m tonnes, and Union Steel has plans for a new 500,000 tonne-per-year development.

Experience

These groups probably retain the hope that if they can acquire substantial experience of steelmaking they may be in the running when the Government comes to authorise a third coastal integrated steel complex, perhaps towards the end of the next decade. Meanwhile, Hyundai, at least (as described in the article on construction), is also showing interest in taking both a financial and operational stake in the steel industries of other developing countries.

This increase in private sector steelmaking, which mainly uses electric arc technology and turns out reinforcing bar, pipes and galvanised products, does have the effect of introducing greater flexibility into South Korea's steel strategy in that the private companies may well be able, if their plants are profitable, to extend production facilities beyond existing targets. The fact that by 1991 Korean experts are predicting a more than 6m tonnes a year shortfall between domestic production and demand will clearly encourage this trend.

So the world steel industry does not have to worry too much in the next ten years about being swamped by Korean steel exports, in spite of the recent dramatic statement by President Park Chung Hee that by 1986 South Korea would be the world's tenth largest steel producer.

There will, of course, be some exports during this period, partly because of POSCO's need to earn hard currency to finance its debts and future development and partly because the corporation's uneven product range means it is unable to meet domestic demand (especially for steel plate, coils for re-rolling and for special alloy steels) while having disposable surpluses of other products. Last year, Korea exported and imported 1.3m tonnes of steel products. The country's exports thus accounted for less than 2 per cent of world steel trading.

In the past the planners have shown a tendency to underestimate Korean steel demand, which is now expected to reach 10m tonnes this year, three years ahead of schedule, and to continue growing at around 24 per cent a year. The more rapid than expected growth of the construction industry has been partly responsible, and this year Korea expects to import 160,000 tonnes of reinforcing bar to satisfy a 30 per cent increase in demand for the product. Total domestic demand for reinforcing bar is put at 1.8m tonnes this year.

Some steel products, such as girders, steel rails and sheet piling, are not currently produced in Korea at all and so will continue to be imported for the foreseeable future. There is also a severe shortage of many special steels, although one important gap for the electrical industries will be filled from September of this year when POSCO brings on stream an 80,000 tonnes a year silicon steel manufacturing plant.

Last year, there was a big shortfall in stainless steel production, with the Korea Special Steel Company (part of the Sammisa group) turning out 130,000 tonnes of stainless steel bars, plates and pipes against domestic demand of 540,000 tonnes. A new stainless steel plant with 100,000 tonnes per year capacity is to be constructed, starting this year, by Daehan Jungki, and Korea Special Steel will by 1985 have completed its expansion programme for another 950,000 tonnes per year capacity. According to the Ministry of Commerce and Industry, this will give Korea a total capacity of 1.55m tonnes a year in special (mainly stainless) steels by 1985, by which time domestic demand is predicted at 2m tonnes.

The Government says that more rapid expansion is impossible because of shortages of skilled labour and difficulties in raising the vast capital sums required.

South Korea's brushes with steel protectionism, with the EEC, the U.S. and Australia, have also cooled the ardour for steel exports. In 1978, exports to the EEC are provisionally estimated at less than 100,000 tonnes, against a permitted voluntary quota level of 220,000 tonnes. The Koreans feel that it is not worth upsetting Europe over steel at a time when they are urgently trying to foster trade and technology links with the continent as part of the switch from economic dependence upon Japan. Steel imports from the EEC, meanwhile, have been allowed to grow to 175,000 tonnes in 1978 as part of the same strategy.

When POSCO does export, however, its prices are highly competitive—10 per cent below those of Japan. This reflects lower wage costs and a high level of productivity, which POSCO now puts at 437 tonnes per man year, compared with Japan's 445. European productivity is generally lower, although precise comparisons are impossible because of different systems of counting employees. At POSCO, there are 4,500 subcontracted workers who are not taken into account in the productivity calculation. Domestic steel prices are controlled directly by the Government and for much of last year were running above international levels (steel plate, for example, was $300 a tonne), although recent improvements in the world steel market have brought domestic and international prices closer together. POSCO, as would be expected, pitches its export prices below the prevailing international rate and has exported to 31 countries, which represents a policy of spreading a small quantity of exports thinly in order to gain experience of a large number of export markets.

Dependence

In the field of non-ferrous metals, South Korea's present goal is one of self-sufficiency, reflecting, as with steel, a heavy dependence upon imported raw materials. Substantial imports of aluminium and lead ingots are expected to continue for some years, although production of electrolytic copper and zinc (the latter is one of Korea's few basic metal products for which there is adequate supply of domestic ore) is now just about equal to domestic demand. In the case of refined lead, imports will continue in spite of domestic ore resources because domestic demand remains inadequate to justify investment in a large-scale refining project.

Motors

Demand takes off

MR. CHUNG SE YUNG, president of the Hyundai Motor Company, received a very loud cheer earlier this year when he told a mass assembly of his 10,000 production workers: "It will not be long before you guys too own automobiles."

Two years ago that proposition would have sounded absurd. Then, with GNP per capita of $752 and taxation policies designed to curtail what little domestic demand existed, Korea's motor industry had little prospect of a home base. *In 1976 the country had one motor vehicle for every 164 people—compared with a 1:4 ratio in Japan.*

That was the climate in which Mr. Chung had to persuade his board to invest in the motor industry, and in which the three local motor manufacturers were seeking with difficulty to convince the Government that Korea's proposed car plants could be profitable and successful exporters.

Today the picture is transformed. As per capital GNP passed the critical $1000 mark last year (it is projected at $1,493 this year) domestic demand took off. There is now a six-month waiting list in Korea for delivery of the country's only home-bred car, *the Hyundai Pony.*

This is despite continued *heavy taxation on cars, which* has come to seem more necessary *as the streets of Seoul* have progressively become *choked with traffic. Half the* Pony's $5,000 retail price in Korea is tax and from April onwards the annual car tax for a Ford Granada (assembled from kits by Hyundai since the end of last year) will be $3,760 and $507 for the Pony.

Bonds

Those who want to register a car in Seoul also have to buy bonds to help finance the construction of future stages of the capital's underground railway and they can shortly expect to face a Singapore-style zoning system which will impose heavy fees for anyone using a car in the peak hour with less than a full load of passengers. To complete the picture, petrol now costs well over £1 a gallon.

The effect of Hyundai's export objectives is obvious. From a position of scouring every export market in the world, from Tibet to Belgium, Hyundai is now *trying to hold down* the level of exports. "I hope we can *keep it to 25,000 units this* year, but we may be forced closer to *27,000*," says Mr. Chung. A few months ago the 1979 target was being put at 30,000, against 20,000 in 1978. The revised export target is to be spread among 40 countries, so the Pony is going to remain a rare animal in all its overseas markets.

One small by-product of this situation is that exports to *Britain are unlikely to start* within the next two years, even *though a right hand drive version* of the Pony will be ready later *this* year. The initial European test market operation in Belgium and Holland, begun at the end of 1978, is said to have gone well, but there will simply not be enough cars to continue the thrust.

The Korean motor industry's priorities then are to scale up *production to 1m units in 1981* and to 2m units in 1986. The *Government wants half the 1981* output and 70 per cent of the *1986 output to be exported. Of* the 2m units 70 per cent will be cars, 20 per cent trucks and 10 per cent buses and special vehicles.

In the present situation this throws a heavy responsibility on Hyundai, whose share of output between now and 1981 is expected to increase from 50 to 60 per cent. The Pony remains the only genuinely Korean car *and it accounted for all but 7,000* of last year's motor vehicle *exports.*

Hyundai is in the process of extending its plant at Ulsan on the south coast of the Korean peninsula to raise capacity to 250,000 units a year by 1981. Of these 200,000 would be Ponies, 20,000 Mark IV Cortinas and Granada kits and 30,000 truck and bus.

But the leap now being planned is for a new plant to be constructed inland (thus *rejecting the British* and U.S. advice which persuaded Hyundai *to go coastal with its Ulsan* plant, which has since suffered *from subsidence, having been* built on reclaimed rice paddy) and to be complete by *1984*. It will be financed by an issue of shares of the Korean stock exchange, where Hyundai has kept investors happy with another 22 per cent dividend this year, resulting from post-tax profit of $21m on gross sales of $440m in 1978.

Pony production will continue to be concentrated at Ulsan, but it *remains to be seen* whether the new designs which Hyundai and its Italian design consultant Mr. Giorgetto Giugiario *now have* on the drawing board will be ready in time to go into production in the new plant. These designs centre around a slightly larger basic engine than the Pony's 1200 cc Colt equipment and seem most likely to result in a car designed to present a challenge in the Ford Cortina range. Later this year the Pony will also be available in a 1600 cc version.

One option which Mr. Chung has resisted, despite Govern*ment pressure, is to go into the* small car market. It was even *rumoured at one point that* Government officials, following *the administration's very active* energy conservation policy, were preparing to liberalise (ie reduce import tariffs to non-penal levels) the import of cars under 900 cc in order to apply pressure to the domestic manufacturer.

Mr. Chung dismisses such a possibility as nonsense. "It *would simply* flood the market with Japanese cars and that's the last thing the Government wants," he says. His own company's research has indicated, he *says*, that the Korean market, with its predominance of large families, is not right for a mini-car. The Pony is the smallest Hyundai intends to go and Mr. Chung says his view is *supported by experience in the* Japanese market, where small-model designs have *not* been successful.

Of course there is always the possibility that one of the other manufacturers will choose to rush in where Hyundai fears to tread. Probably the most interesting development in the Korean motor industry in the last year was the entry of the Daewoo group, which took over the Korea Development Bank's 50 per cent stake in Saehan Motors and thus entered a joint venture with General Motors.

Daewoo, founded as recently as 1967, is one of the fastest-*growing* of the Korean conglomerates and last year recorded sales of $2bn. It has a reputation as one of the brightest and toughest groups in Korea and is expected both by Government and its competitors to take Saehan into new and more adventurous fields involving the development of its own model as a rival to the Pony. Up to now Saehan has *only* assembled Opel and Chevrolet models with Japanese and German engines for the company's large range of buses and trucks.

Meanwhile Kia, which set out as a bicycle manufacturer and still has a strong line in Honda-licensed motor-cycles, concentrates its passenger production on the successful *Brisa, manu*factured under licence from *Toyo Kogyo of Japan*, where the car sells as the Mazda Familia. *Kia, having* taken over the Asia Motors bus-manufacturing company, is also an important manufacturer of commercial vehicles, but the 1980s should see it, too, emerging as an independent car manufacturer.

If the Korean motor industry is to meet its Government target of exporting 1.4m units in 1986 (more than 30 times the 1978 level) there will clearly have to *be rapid expansion beyond that* already publicly indicated by *Hyundai.*

It will be interesting to see to where Korea will look for its motor industry technology in the future. Hyundai, in preparation for its new plant, has been talking to a number of major European manufacturers, including Renault and Volkswagen, but Mr. Chung says these discussions have not been *concluded.* "*It has still* not been decided whether we need *to have a partner at all*," he says.

It is certain though that the new plant will rely heavily on foreign machinery imports and that it will be much more highly automated than Ulsan, where local management has struggled to get the man-hours rate for Pony production down from 60 to 30 per unit, which is still 12 man-hours short of the Japanese rate for a comparable model.

It is also certain that the investment will be heavy at a *time when Hyundai must* be relying heavily on the profits *made from* its assembly of knocked down kits of Ford *models* to offset losses on exported Ponies. Under an agreement with Government, Hyundai can import one Granada kit for every five Ponies exported.

The Granada sells for an astonishing $26,000 in Korea, although more than half of this is tax. The Pony is now 95 per cent Korean-made, although this claim disguises the fact that many components are assembled from overseas kits or manufactured with licensed technology.

Meanwhile *domestic demand*, fuelled by the rapidly increas*ing wages of, among others*, the Hyundai workers, will continue to boom, perhaps taking domestic demand to 2m units a year by 1991. This would indeed be a volume base from which the Koreans could make serious inroads into the *world motor* vehicle market.

KOREAN MOTOR INDUSTRY PRODUCTION AND EXPORTS 1967-1978 (UNITS)

	Cars total	Cars exports	Buses total	Buses exports	Trucks total	Trucks exports	All vehicles production	motor exports
1967	4,983	—	236	—	1,385	—	6,604	—
1975	18,509	—	3,808	—	14,973	31	37,290	31
1976	25,605	558	3,468	36	19,219	649	48,292	1,243
1977	42,284	5,075	5,453	6	35,263	4,055	83,000	9,136
1978	*85,693*	*25,638*	*7,279*	*67*	*63,446*	*566*	*156,418*	*26,271*

Source: Ministry of Commerce and Industry

KOREA'S MAJOR MOTOR MANUFACTURERS

Company	Ownership	Total investment U.S.$	Production capacity (units per year)	(End 1978) Models
Hyundai	Publicly quoted company; member of Hyundai group	$217m	140,000	Ford Cortina Mk IV, Ford Granada, Pony, Trucks, Buses
Kia	Independent company, has strong technical links with Honda. Began as bicycle manufacturer	$116m	70,400	Brisa, Trucks, Buses
Saehan	Owned 50-50 by General Motors and Daewoo group. Daewoo stake acquired last year from Korea Development Bank	$82m	68,000	Rekord, Gemini, Buses, Trucks
		Total $416m	278,400 units	

Electronics

A challenge to Japan

NOWHERE IN South Korean industry is the sense of treading in Japanese footsteps more strongly felt than in the electronics business.

Korea's electronics companies began life in the late 1950s by providing cheap assembly bases for Japanese (and U.S.) kits. Since then they have moved into the middle ranges of sophistication in consumer electronics, offering a big challenge to their mentors in the manufacture of televisions, radios and low-price audio equipment.

The industry's export targets have also been constructed in line with the rule of thumb theory that Korean electronics is ten years behind Japan. In 1976 the Japanese exported $9bn of electronic goods. In 1986, the Koreans are programmed to achieve the same figure.

Many in the industry, however, believe that it is too much to expect the electronics companies to be contributing 20 per cent of total Korean exports by 1986, in spite of their record of averaging 37 per cent a year growth between 1962 and 1977. Mr. Sung-Chan Park, president of Gold Star, the *Lucky* Group company which leads the Korean electronics industry, believes the comparison with Japan does not apply this time because the Korean population is three times as small, creating difficulties in advancing to crucial economies of scale, especially in audio products and components.

"I should say that the most optimistic projection would be for the industry's exports to grow to 10 per cent of the country's total or $5bn by 1986, but you never know whether the Government might help us to do better. We shall certainly be aiming for their target," he says.

One thing the electronics companies urgently require of the Government is the opening of what they believe will be floodgates in the domestic colour television market. Some in the industry are hopeful that the Government will relax its position and permit colour TV broadcasting later this year, although current political worries about stimulating consumer demand at a time of high inflation suggest this could be wishful thinking.

The Korean colour television industry, still only in its third year, has run into deep problems because of the recent decision by the U.S. to impose a quota of 289,000 Korean seats in the 17 months from February. This was a reaction to a pattern of export growth characteristic of Korean electronics: 1976: zero; 1977: 20,000 sets; 1978: 500,000 sets. The three Korean manufacturers (Gold Star, Samsung Electronics and Taihan Electric Wire) have an immediate capacity of 1.2m sets a year and could easily quadruple this level by transferring black and white set production lines to colour. Around 3m monochrome sets were produced in Korea last year. The Korean TV industry is already much bigger than Britain's and if they can find the markets, Gold Star and Samsung will not be far from the capacity of Matsushita, the world market leader with 3.7m sets a year.

The quota blow to colour sales, which has reduced production this year to well under half capacity, has also come just when the industry is breaking through to a high level of localised production by manufacturing its own colour tubes. This summer, Gold Star, for example, will start up a 600,000 colour tube units per year facility at the vast Gumi electronics complex in the central part of the country. Samsung, reacting to U.S. developments, has delayed its tube manufacturing plans, but will still be producing colour tubes in bulk later this year.

Dr. Wan Hee Kim, recently appointed President of the Electronic Industries Association of Korea and one of the men closely involved in the original Government planning of the electronics offensive, is bitter about what he believes to be the major role played by Japanese offshore manufacturers in the U.S. in blocking Korean products. The Japanese U.S. quota is 1.75m sets a year—"only because they got there first," says Dr. Kim. The U.S. is by far the Koreans' most important electronics market, taking 31 per cent of all output last year, compared with 40 per cent in home sales, 9 per cent to Japan and 1.5 per cent to the UK.

But the Korean manufacturers, true to form, are already well advanced in their plans to beat the Japanese at their own game. Mr. Park says he has virtually sewn up an agreement to assemble Korean colour TV sets inside the U.S. and outside the quota restrictions. He says he is open to offers from Europe for similar ventures, although Gold Star is caught in the licensing problem of the Telefunken PAL colour system. The U.S. facility could start operating later this year at a test-run rate of 100,000 sets a year to investigate the economics of the operation. He has had to agree, with much reluctance, to use U.S. picture tubes.

Likewise Samsung has had detailed talks with European interests, most productively with Germany and France. "We would be interested in co-operating on the basis of Korean manufacture and European design, marketing, know-how, sales and management, but if necessary we will assemble in Europe too. I'm looking for offers, says Dr. Y. S. Chang, a key member of the Samsung managerial think tank and currently closely involved with electronics strategy. At $167 ex-works, the export price of a 16-inch Korean colour set certainly has price on its side.

Television production is critical to Korea's consumer electronics industry, because it is the only substantial area where the major companies have moved to both international scales of production and a high level of domestically produced components.

This is a useful reminder of the youth and relative primitiveness of Korean electronics. That $1.4bn of exports last year, for example, comprised 43 per cent of assembly-only goods whose components were shipped in and finished products shipped out by the 35 foreign-owned companies and 85 foreign-Korean joint venture companies which still play a major role in the industry. These companies are greatly outnumbered by the 580 pure Korean registered electronics companies, but many of these are small components manufacturers of subcontractor status.

South Korea's balance of trade in electronics is, in fact, only just positive. In 1977, the country imported $847m of electronic goods, against total exports of $1.18bn. Manufacturers using a certain level of imported parts are required to re-export at least 80 per cent of their output.

Men like Dr. Kim and Government officials are confident that the reliance on foreign parts will rapidly decrease in the next five years as the big Korean companies scale up production of audio products in the same way as has happened with television output in the past three years.

Mr. Chang of Samsung believes that in the next five years, the Korean industry will be busy filling the gap in low-price audio left behind by the Japanese. That means improving quality control (mainly by increasing automation), developing in-house manufacture of key components—some of which have been in maddeningly short supply in Korea this year—and stepping up spending on research and development.

As for components, high on the Government's list of electronics priorities is the stimulation of the domestic manufacture of semi-conductors and integrated circuits, leading eventually to a capability in mini-computers. The Government has put up $60m, alongside $30m from the World Bank, partly to establish the Korea Institute of Electronics Technology at the Kumi industrial complex, where ten plants are either complete or under construction, five for the manufacture of semi-conductors and five for other computer components.

Semi-conductors are already a big industry for Korea because of the presence of Motorola, Signetics and Fairchild in one of the country's export-free zones, where the U.S. and European companies can assemble their products and re-export without customs payments. The output of these companies accounted for virtually all the semi-conductor exports of last year (about 18 per cent of total electronics exports), and by 1986 semi-conductors exports should be worth $2.28bn if all goes to plan.

By that time, however, it is intended that a large slice of these exports will be indigenous products of the Kumi companies, all of whom have joint venture or licensing agreements with established (mainly U.S.) manufacturers. At present, only Samsung has a full operating semi-conductor company, Samsung Semiconductor, established in 1974. This chiefly produces circuits for Samsung's electronic watch business and bipolar transistors.

By 1986, Dr. Kim believes that Korea will be exporting its first computer system. Other senior figures in the industry are less confident, but all believe the Korean companies will find a growing place in advanced electronics.

LEADING ELECTRONICS COMPANIES

	Main products	Output 1978 $m	Exports 1978 $m	Employees	Market share %
Gold Star (Lucky Group)	Consumer products; affiliates in communications, semiconductors	185.6	96.6	10,000	8
Samsung Electronics	Consumer products, affiliates in semiconductors, tubes, components, — communications	170.8	98	9,000	7
Motorola Korea (U.S.-owned)	Integrated circuits, semiconductors, transistors	105	102	5,000	4.6
Tai Han Electric Wire	Consumer products, cable, communications	82	34	8,350	3.5
Signetics Korea (Philips)	Integrated circuits	71	71	3,010	3
Anam Industrial	Integrated circuits, transistors, watches	70	68	4,500	3

Source: MCI (estimates)

COMPOSITION OF 1979 EXPORT TARGET (by value)

	%
Semiconductors and integrated circuits	23
B/W television	12
Radios	14
Tape-recorders	9
Amplifiers	6
Transceivers	2.5
Colour TV	2.7
Components	14
Other	15.8

KOREAN ELECTRONICS OUTPUT AND EXPORTS

	1978	1979	1981	1986 $ current prices
Consumer electronics	bn	bn	bn	bn
Total output	0.94	1	1.52	4.44
of which exports	0.64	0.7	1.09	3.16
Industrial electronics				
Total output	0.21	0.34	1.7	3.44
of which exports	0.1	0.2	0.45	2.24
Electronic components				
Total output	1.12	1.31	1.98	5.48
of which exports	0.6	0.9	1.32	3.57
Total electronics exports	1.34	1.8	2.86	8.97

Source: Electronics Industry Association of Korea.

Construction

Overseas contracts soar

LAST YEAR South Korean construction firms provided their country with an embarrassment of riches as the pace of their expansion overseas continued to outstrip all forecasts.

Less than a year ago, the Seoul Government was talking about overseas construction contracts worth around $4bn in 1978 against $3.5bn the previous year. In fact, the figure has turned out to be well in excess of $8bn, and to support this massive invisible earnings operation the Korean builders shipped out another 50,000 or so workers, taking the total to almost 100,000.

Given that the Koreans' main market, the Middle East (accounting for around 70 per cent of business), is generally considered to be in decline from the formidable building boom of the mid-1970s, this represented a remarkable performance.

It did, however, cause problems. At a time when domestic inflation was being pushed upwards by a variety of cost and wage push factors, the unexpected increase in the money supply from foreign exchange earnings caused the Government to impose tight limits on companies' freedom to convert foreign earnings into local currency.

Although these limits have now been officially relaxed—partly in recognition of the liquidity difficulties they caused within some of Korea's biggest industrial enterprises—the spirit of the policy persists. The Koreans are being encouraged not to bring their remittances home, but to invest them in projects of the countries where the construction companies are active. This policy reflects in turn the Government's desire to see large sections of the country's exports, whether visible or invisible, tied to agreements with raw materials rich countries. Thus Hyundai Construction, still very much the biggest of the Korean building firms, is negotiating a stake in Saudi Arabia's steel and aluminium industries by offering to contribute both capital and then operating personnel for the plant when it is complete.

This type of development makes sense from other points of view, too. The Koreans are well aware that the best times have indeed passed for the Middle East construction industry and that in future pure civil engineering operations related to infrastructure development will proceed at a more modest pace. This decline has obviously not been helped by instability in Iran, where Korean contractors have about 5 per cent of their business.

But this slowdown does not equally affect the more sophisticated end of the construction industry: the building of plant for the metals, energy, and chemical industries. Here, the Koreans know that they are at a disadvantage compared with their competitors from Europe and the U.S. who are called in at the beginning of such projects for technical advice and whose specialist companies in such fields as turbine manufacture then take the high added-value portion of contracts.

Mr. C. W. Choi, chairman of the Samwhan building company and also president of the Construction Association of Korea, says there must now be a big campaign by the Koreans to identify themselves as "development partners" rather than competitors with both the suppliers of high technology and the countries where the projects are taking shape.

Even so, Mr. Choi's personal view is that last year's level of contracts cannot possibly be repeated in 1979, leading to the first decline in the pace of the industry's order-taking since it emerged as an international force five years ago. He predicts a 30 per cent downturn in both the overseas and domestic sectors this year.

The domestic sector, which accounts for roughly half of the Korean industry's total sales, is expected to slow down as a result of a tighter Government public spending policy this year and also because of a continued general decline in the private housing sector. This will only partially be compensated for by the still white-hot pace of investment in facilities for Korea's planned switch of emphasis away from light industries towards the heavy and chemical industries.

All these factors can be expected to work in favour of the bigger construction companies, 30 of which account for around half of the industry's turnover. The other 519 companies are mainly very small outfits, and the Government is putting further pressure on the rationalisation of the industry into larger units by its recent ban on licences for new construction enterprises.

Ambitions

There is no doubt, also, that these major construction companies are destined to play a much more central role in the growth of the Korean industrial economy in general by providing, in addition to their conventional civil engineering skills, the assembly component for Korea's ambitious programme of plant exports. At present, this is an area of only limited export success for Korean industry, and the value of export contracts secured last year actually fell $161m from $305m the year before.

The pace of domestic requirement is, however, picking up rapidly as a result of the industrialisation process, with the country's investment in new heavy plant forecast by the Korea Development Institute to quadruple (to about £18bn) in the period 1987-91, compared with 1977-81.

Korea's strategy in the field of plant (by which is meant chiefly oil refining, steel, petrochemical, cement, fertiliser, pulp and paper and electrical installations) is to resist the offers of foreign turnkey bidders for its domestic contracts, forcing high-technology foreigners to work alongside Korean companies in order to achieve a spin-off of know-how. Meanwhile, abroad, the Korean construction and heavy industry companies will increasingly be offering their services on either a straight sub-contract basis or in full-scale joint ventures with western or Japanese firms.

This means that the relationship between the big construction companies and their domestic engineering and heavy industry affiliates is of increasing importance as the Koreans move towards a position in the 1980s when they hope themselves to be bidding for foreign contracts on an independent turnkey basis.

For a company like Hyundai Construction, the links with the Hyundai group's heavy industry, engineering and steel fabrication activities are already strong and well used. Many steel structures for the Middle East have been knocked up at Hyundai Heavy Industries' shops close to the same group's Ulsan shipyard.

According to Mr. W. J. Chang, the former military man who is now President of Hyundai Construction, this inter-family relationship, which even includes a shipping company combined with his own employees' high productivity, is already allowing Hyundai to undercut other Korean contractors by a steady 15 per cent. He is predicting an increase in Hyundai Construction's rate of orders this year from $2bn in 1978 to $2.4bn and says the company has already mapped up eight major contracts this year, with another 20 under negotiation.

But Hyundai Construction's leadership will not be retained automatically. Hyundai International split from the Hyundai group five years ago after a disagreement between Mr. I. Y. Chung, its chairman, and his elder brother, Mr. Y. Y. Chung, who started the Hyundai group and is still its chairman.

Hyundai International does not figure yet in the construction industry's top ten, but as an integrated manufacturer and assembler of heavy industrial projects it is being styled to capitalise on the general construction-heavy industry strategy already described. Likewise other major groups, such as Daewoo and Samsung, have linked construction with heavy industry activities, and a company like Samwhan, which started life in 1946 as a pure construction outfit, is today stressing the resources of its engineering affiliate. One construction firm, Kyungnam, has bought a small U.S. consultant engineering business in order to sharpen up its technological and planning capabilities.

The conglomerates are also in a position to use their relationships with foreign advanced technology companies formed by their heavy industry divisions as a bridgehead for similar co-operation on overseas and domestic plant contracts. Daewoo Heavy Industries has over 20 such links, Hyundai International lists more than 40, and such technology agreements are rapidly proliferating in fields as diverse as nuclear reactors, diesel engines and dredging equipment.

Whether the rest of the world construction industry should worry and refuse to co-operate with the Korean strategy, or whether it should see the availability of still relatively low-cost Korean partners with intensive if brief experience of some very big projects, is clearly going to be at matter of judgment in the advanced countries.

According to Mr. Chang, Korean labour costs ($1100 per month for an overseas worker, against a national domestic industrial average of not much more than $400) are still a good one-third below European costs, but another year of 15.6 per cent real wage inflation last year has already made the Korean worker uncompetitive with his rivals from the Philippines, Morocco, and India.

Pressure

As Korean costs continue to rise sharply, clearly the competitive edge is harder to find, and the Koreans accept that after four very good years in the Middle East, they will increasingly have to sell on quality. So far, however, there is still no problem in luring Koreans to the inhospitable climate of the Arab world. Hyundai has a 95 per cent re-application rate from workers who have completed their 12-month contracts.

One factor which is changing, as a result of customer pressure, is the Koreans' willingness to purchase domestically available supplies and services. Their image of total self-sufficiency in the past has done harm to their standing with local traders. This self-sufficiency, however, is really a misnomer as the big companies already buy half their materials from third countries. Hyundai last year spent $500m on such supplies—half of it in the U.K.

There is no doubt, also, that the Koreans will be looking increasingly to non-Middle East markets. At present, 10 per cent of the industry's overseas business is in the Far East, 4-5 per cent in Africa and 7-8 per cent in South America. To some extent, the Koreans are limited in attacking these developing country markets because they cannot afford the luxury of aid-linked trading or even the soft loans of their advanced competitors. The companies do not doubt, however, that their horizons, as they become more technology-intensive, will also become wider in terms of markets.

Shipping and shipbuilding

Sprint strategy a miscalculation

SOUTH KOREA'S shipbuilding industry represents, arguably, the gravest miscalculation so far by the country's industrial planners. The strategy to sprint within 15 years to second place in the world industry behind Japan—although still not necessarily unattainable—has resulted in a string of serious financial problems.

Two of the companies licensed to build important new plant, Koryo and Korea Shipbuilding and Engineering, found the strain of financing construction at a time of profound recession in their existing businesses too much and their part-complete facilities have now been passed over to the more secure financial strongholds of two of Korea's biggest conglomerates, the Samsung and Daewoo groups respectively.

Meanwhile, Hyundai Heavy Industries, which set the Korean industry on the road to international status, has had to cut its shipbuilding workforce from 30,000 to 20,000 in the last two years as it has struggled, in spite of highly competitive pricing to fill its huge docks which are capable in theory of swallowing 1.6m dwt of orders per year.

In 1978 Hyundai had to be satisfied with output of 29 vessels aggregating 693,000 dwt and its order book in mid-March comprised 33 vessels totalling 731,900 dwt.

During this difficult period, Hyundai has been able to draw strength from the rest of the group and the 10,000 men no longer employed in shipbuilding have been comfortably absorbed into other heavy industrial activities, such as steel fabrication for land construction work, in the vicinity of the Ulsan yard. In Korea, there is no shortage of demand for experienced steelworkers and outfitters.

Mr. C. H. Cho, the Hyundai Corporation director responsible for ship sales, also says the yard has struggled resolutely to maintain profit margins in its tenders for new business where Hyundai has frequently undercut its competitiors by as much as one-third and still undercuts Japan by 10 per cent. But he admits that in practice the margin frequently has vanished under the tide of rising costs once the contract has been started.

No financial figures are published for Hyundai Heavy Industries, which is a part of the Hyundai group not yet quoted on the Seoul stock exchange.

Meanwhile, Hyundai continues to try to improve its range of technical skills and versatility as a shipbuilder. About 20 engineers were sent for training overseas last year as part of the yard's build-up to offering its services as a builder of liquid natural gas carriers in association with Gaz-Transport and Technigaz. So far, however, the yard has not won an order for this most sophisticated type of merchant ship.

On a more mundane level, the shipyard, like its neighbouring Hyundai Mipo ship repair yard, is also working hard at improving quality, especially on the outfitting side. Workforces at both yards have been criticised by Western equipment suppliers over the quality of on-site installations.

Mr. Moon-Doh Chung, president of Mipo, believes his yard has now established firm quality control on basic repair jobs. "You have to remember, we are still new, so that for certain complicated works we may require a little more improvement," he says. In spite of that, Mipo operated at 80 per cent capacity last year—a very reasonable performance in the circumstances of the market — and is confident of lifting last year's gross turnover of $50m by 30 per cent in 1979.

Established

Hyundai's shipbuilding yard, six years old last month, is by Korean standards a venerated old-timer in the industry and certainly well established in a way not true of the country's other large-scale shipbuilding facilities at Koje and Okpo islands.

The Koje yard is now practically complete, requiring only construction of the workers' accommodation — standard at large industrial sites in South Korea.

Koje yard began as a two-stage project involving construction of two docks, one of 100,000 dwt (or Panamax-size) capacity and a second able to hold ships up to 500,000 dwt.

The project then was the work of the Koryo company, but soaring construction costs created cash-flow problems and in 1977 the Samsung group, Korea's oldest and perhaps strongest large industrial and trading group, took over the project as a substitute for its own plan to build a mainland shipyard.

Early last year, Samsung signed an agreement with Burmeister and Wain of Denmark and IHI of Japan for technical assistance in running the yard and in training workers. About 1,000 men are now on site and at work on the company's first contracts.

These orders are from Indonesia, with which Korea has close ties, for two 15,000 dwt oil products carriers and the yard has also won an order recently for a 20,000 dwt products carrier from Pan Korean shipping.

Mr. Eun Taik Lee, President of Samsung Shipbuilding, admits frankly that the $20m contract figure for the Indonesian deal is a loss-making figure. "We will have big losses with these ships, but we have to do it because as newcomers to the industry we must gain experience." He adds that other deals now under negotiation with Australia and Northern Europe have been pitched closer to profitability.

Mr. Woo Dong Cho, chairman of the shipbuilding company and of the parent Samsung Heavy Industries, says the company has no regrets about entering shipbuilding, which he is confident is a strategic industry for the economic advance of both Korea and Samsung. However, the company has gone back to the drawing board on the second stage of the yard, originally due for completion in 1980.

It could still emerge as a 500,000 dwt VLCC dock (with the perhaps more useful possibility of building two Panamax carriers side by side), but it is equally likely to turn out to be the size of the existing dock. "We have no firm commitments," Mr. Lee says.

Potentially the most exciting venture in Korea shipbuilding because the least defined, is the Okpo Island yard, designed by Korea Shipbuilding and Engineering to take that long-established company into the big league of world shipbuilders with a giant 1.25m dwt construction dock.

THE MAJOR SHIPYARDS

	Ownership	Nominal capacity	Prospects
Hyundai Heavy Industries	Unquoted company, part of Hyundai group. Sales handled by Hyundai Corporation	1.6m dwt per year	Orderbook of 731,900 dwt
Korea Shipbuilding and Engineering (KSEC)	Long-established independent company	700,000 dwt per year	Orderbook of six months' work
Daewoo Shipbuilding and Heavy Machinery	Daewoo conglomerate took over Okpo island yard construction from KSEC last year. Due for completion 1980.	Largest shipbuilding dock in world with 1.25m dwt capacity	Uncertain, but likely to involve heavy non-marine content
Samsung Shipbuilding	Samsung conglomerate took over Koje Island yard project from Koryo. Almost complete	Single 100,000 dwt dock, plus plan for second dock of undetermined size	Orders for four products carriers

The burden proved too great for the limited means of KSEC, already suffering from the industry's slump, and the Government spent some time looking for an alternative operator. Both Samsung and Hyundai looked at Okpo and decided it was not viable only to find that their arch-rival, the younger and some say more ambitious Daewoo group, was prepared to take it on.

Formally, the ownership is shared between Daewoo (51 per cent) and the Korea Development Bank (49 per cent), but it would be normal for the bank's share to be sold to private investors once the project is established. Daewoo says it expects its own investment to amount to $400m and the bank has put up $140m as paid-in capital for what is in effect an interest-free loan to cover Daewoo's basic construction costs until 1981. Most of the rest of the cash is coming in the form of guaranteed loans associated with foreign equipment purchases.

Characteristically, Mr. Kim Woo Choong, 41, chairman and founder of the Daewoo group, has chosen a finance man to head the new venture. Mr. In-Kin Hong, president of the recently titled Daewoo Shipbuilding and Heavy Machinery, spent 16 years with the Korean Finance Ministry, and via the bridgehead of an economics refresher course at Harvard, joined Daewoo in 1977 to run its Orient Securities affiliate.

He took up his present job five months ago and is the same age as Mr. Kim. Last year, the Daewoo group had exports of $850m and it intends to boost this figure to $1.2bn this year.

Okpo will not contribute to exports in 1979. The takeover process has delayed construction work and the basic shipyard facilities, designed by A and P Appledore of the UK, now will not be complete until the end of 1980. Daewoo Development, the group's construction company, has also taken over site operations at Okpo.

By 1982, Mr. Hong says that Okpo, now a fishing village, will have a population of 100,000 and his company a workforce of 20,000 Koreans. He has already started to recruit and Daewoo will shortly open its training school at Okpo to create 1,200 skilled men a year. "The men at Okpo will be the elite and they will have the most comfortable and hospitable environment possible," he says.

But the real question is: what will Okpo build, given that the 1.25m dwt tanker, which looked a certainty when the yard was conceived pre-1973, is still no more than a figment of the wilder shipowners' imaginations?

For a start, Mr. Hong says, the workforce will engage in the structural steelwork and crane construction necessary to equip Okpo itself. It will then become the company's answer to Changwon.

This is hardly a modest statement as Changwon is the heart of South Korea's heavy industrial future—a site for 191 heavy machinery works still being carved out on a 12.5m square metres site 50 km inland from the major port of Busan.

Mr. Hong says Daewoo will build on its existing technical agreements with such companies as Brown Boveri of Switzerland, ITT and Babcock to produce a wide range of heavy industrial plant and equipment, using the huge concrete dock as a steel fabrication yard. As demand emerges it will also build ships, but it is important to note that so far the company has not signed any technical agreement with a shipbuilder.

The uncertainty over Okpo's eventual status in the pure shipbuilding industry and of Samsung Shipbuilding's second phase injects a large measure of uncertainty into South Korea's future shipbuilding capacity, still officially intended to increase to 4.25m grt per year by 1981, compared with 2.7m grt pre-Okpo and Samsung.

That 4.25m figure is what has given the OECD shipbuilding working party such anxiety in the past two years because it represents about one third of the total volume of orders forecast for 1980-81. In practice, for the reasons suggested above, real capacity in terms of available workforce is unlikely to reach 3m grt in that year, although the Koreans are obviously ready to spring when the market turns. Companies such as Daewoo and Samsung have no desire to become major shipbuilders if it means losing a lot of money.

KOREAN SHIPBUILDING: OUTPUT AND PROJECTIONS

(gross registered tons in 000s)

	1976	1978	1986	1991
Construction for domestic owners	50	158*	555	1,012
Ship exports	634	618*	1,548	3,125
Total ship output	684	776*	2,103	4,138
(% share of world market)	1.9	3.4	6	7.5

Sources: Ministry of Commerce and Industry (1976-78 figures) Korea Development Institute (forecasts). * Provisional.

Meanwhile, the Government is doing what it can to help. It has improved terms for export credit from 75 per cent to 85 per cent. Repayment periods are usually between five and 10 years and interest rates in line with the international level for the industry at 7 to 8 per cent. There are also plans to subsidise the price of steel plate, the industry's main raw material.

Under the terms of the fourth shipbuilding promotion plan for 1979-80, recently announced, $254m is to be made available to finance this policy and the Government expects this to result in orders for 213,497 grt of vessels, of which 186,000 grt will be ocean-going types. Under the plan, Hyundai expects to get 11 vessels totalling 133,590, KSEC two at 34,584 and Samsung three small vessels totalling 6,050 grt. The rest will go to the country's six medium-sized yards (headed by Daedong and Donghae) and its 111 small yards.

Another target is to increase the localisation ratio of ship construction materials from its present level of not much more than 50 per cent to 80 per cent by 1981. The recent opening of Hyundai's marine engine plant will be a big contributing factor in this process.

There is one other important factor working in favour of South Korea's shipyards — the growth of the country's own merchant navy.

As the table shows, this has expanded steadily and is expected to reach 6m grt by 1981—roughly the size of the fleet now registered in Sweden. South Korea has a strong force of merchant seamen — 34,000 men—of whom only half now serve on Korean vessels.

Although South Korean shipping companies, like those in many other countries, got into widespread financial difficulties last year, necessitating an $80m Government injection to finance debt re-scheduling, the Government is confident that by rationalising the 71 ocean-going shipping lines and by carefully financing expansion of the companies' container-shipping fleet, the industry will have a secure base for the future.

South Korean vessels already carry more than 45 per cent of the country's total seaborne trade, but the share for liner cargoes is only about 10 per cent, which resulted in a head-on clash between South Korea and the Far East Freight Conference last year when the conference refused to allow Choyung to join Korea Shipping Corporation in its membership.

Eventually, the Koreans won and Government plans call for the ordering of another three container ships this year to take the national fleet to the size necessary for a 40 per cent liner trades share by 1981.

At the end of 1978, Korea had 42 container-carrying vessels (full or part-container) totalling 169,000 grt. The fleet is also comparatively old, with 20 per cent of the 497 vessels over 15 years old, which should also produce more business for the Korean shipyards, where owners are financially induced to build at least one third of their requirements.

Grievances in the public service: By Philip Bassett

Why civil servants strike

THE STRIKE of 530,000 white-collar civil servants called for today underlines a major handicap facing the British Government in the run-up to the General Election: the State's direct employees are throwing the very machinery of Government into considerable disarray.

Some key Government computer centres have been closed down for five weeks; the Government has been forced to take the drastic steps of introducing emergency legislation in an attempt to re-open the Scottish courts and of suspending civil servants who have refused to do work normally done by those a reluctance to strike.

In meetings at the end of last week Ministers thought they had all but reached a pay settlement with the majority of the civil servants unions by managing to isolate the two largest unions which have spearheaded the selective strikes which have thrown the machinery of Government into such disarray.

But the meetings came too late for today's strike to be called off, though by publicising the offer of 9 per cent now, with half the rest of the rises due from a comparability study to be paid next August and the remainder from March 31 next year, Ministers obviously hoped to spike the action.

Long term

A speedy settlement is in doubt because of some aspects of the offer and the way it has been made. The long term cost of forcing a split in the unions may also be severe in terms of the future of industrial relations in the Service.

There are no legal restrictions on the right of civil servants to strike, though career pressures and their traditional conservatism, particularly among older staff, have created a reluctance to strike.

Such widespread action by workers traditionally associated with loyalty and ineffectual trade unionism rather than militancy is embarrassing enough for the Government.

Further embarrassment arises from the fact that the civil servants are pressing for pay comparability, the principle that has been used to pacify groups such as the local authority and health service manual workers, the nurses and the ambulancemen. Most embarrassing of all for a Government committed to as yet unspecified comparability rises for those groups is that the increases due on the basis of the findings of the Civil Service's Pay Research Unit (PRU) comparability studies are so large.

Private sector

Both unions and Ministers admit that some grades of civil servant can expect little or nothing extra as a result of comparability studies, meaning a comparison of their pay with that of people doing similar jobs in private industry.

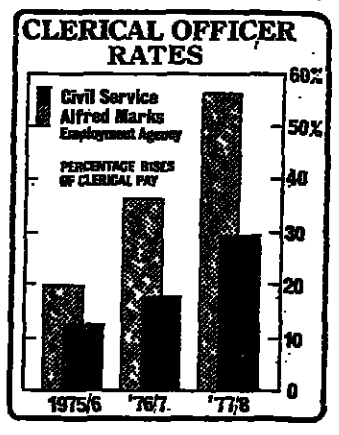
But the unions do estimate that rises of 20-25 per cent will become due for 3,300 cleaners, for example; 23-26 per cent for the 76,600 clerical assistants; 25-33 per cent for the 89,600 clerical officers; and 26-36 per cent for 47,200 middle-ranking executive officers.

Senior administration staff, about 6,200 up to the rank of Assistant Secretary, would according to the unions be entitled to rises of 40-50 per cent.

The unions claim that the figures clearly show how the private sector has got around pay limits imposed by the Government's incomes policy in the past. The Society of Civil and Public Servants, which represents executive officers and has been most eager for action, estimates that under Stage One of the Callaghan Government's pay policies staff in similar jobs in the private sector received above average pay increase of £494, compared with the £312 Civil Service increase; £605 compared with £208 under Stage Two; and 16 per cent compared with 9.5 per cent under Stage Three.

The PRU system was introduced in 1956 to take Civil Service pay out of the political arena. Detailed job-for-job comparisons are made between Civil Service pay rates and rates in a "representative" sample of public and private sector companies.

Very broadly, the clerical officer and assistant grades compare with office clerical staff, the executive officer grades with lower to middle management, and the grades of Principal, Senior Principal and Assistant Secretary with higher middle and more senior management. The three top administrative grades of Under Secretary, Deputy Secretary and finally



Permanent Secretary are not covered by the system at all, but are examined by the Top Salaries Review Board.

Reports on the PRU findings are passed to the Civil Service Department and the unions, and an elaborate system of evaluation takes place. Negotiation then determines how precisely to take account of elements such as company bonus payments, meal allowances, and company cars.

The system has been criticised for not putting enough value on the considerable advantage of index-linked pensions and job security enjoyed by civil servants. Their pay is adjusted in three ways to take account of pensions. Male civil servants pay a 1½ per cent levy for family benefits. PRU settlements are reduced by an amount equivalent to that paid by those in comparable jobs elsewhere as examined by the PRU; and a further deduction, based on an assessment by the Government Actuary, is made to take account of differences, including index-linking, between civil service and other pension schemes.

In the last PRU settlement, before it was suspended in 1975 at a time of pay controls, the effect of these calculations was to reduce pay rates by about 7 per cent, of which 1½ per cent was the Government Actuary's assessment of the value of pension privileges.

Critics argued then that as the rate of inflation had risen to 27 per cent that valuation was far too low. The unions, which are now negotiating on the basis of the new as yet undisclosed valuation of the Government Actuary, are wary of talking about such easily-opened wounds.

Job security is more generally regarded as unquantifiable, though for many workers and staff for whom redundancy is at least a possibility—and for white-collar staff particularly so with the advance of the industrial use of microprocessors—it is nevertheless important.

Recruitment to the Service, particularly in the clerical and executive grades, has been seen as an economic barometer because of the job security offered though the staff cuts in recent years and the pattern of Civil Service pay may have reduced the value of security. In 1973, under a Conservative pay policy, 12.6 per cent of one of the most volatile grades, the clerical officers, left the Service. After a special settlement to correct pay policy anomalies, the proportion fell sharply to 7.4 per cent in 1976. The Callaghan Government's series of pay restrictions has reversed the trend, with 11.5 per cent leaving last year.

The PRU system has in fact never sat easily with wage controls. It is based on catching up with the private sector, which invariably finds ways of evading norms more rigidly applied in the public sector. So once the controls are eased, the PRU shows large rises to be due.

Disputes over pay have left permanent scars on the Service's industrial relations. Selective and limited strikes in 1973 led to the establishment of a study group called the Wider Issues Review Team which had the co-operation of the Civil Service unions to examine the "considerable unrest" in the Services.

The team's report in 1975 pointed out that the character of the Service had changed: "Other jobs have become attractive and more widely available to those who meet the Service's recruitment standards, and today the very much larger number of executive officer entrants do not regard the Civil Service or themselves as very special."

Unprecedented

The Government's original offer, tabled a week ago, of 7 per cent stirred even those moderate unions which had been holding back from action into anger. Even the First Division Association, which represents 10,000 senior civil servants, some up to the rank of under-secretary took the unprecedented step of deciding to advise their members to take part in today's action in a move which deeply disturbed Ministers.

The two unions which have led the pay fight, the Civil and Public Services Association, which represents about 119,000 Civil Service clerical staff, and the Society of Civil and Public Servants, representing 105,000 staff 65 per cent of whom are executive grade, said there was no basis for settlement in the new offer.

The FDA, the Institution of Professional Civil Servants and the Association of Government Supervisors and Radio Officers are now prepared to recommend acceptance. But the unions with a greater number of lower paid members and lower rises due from PRU like the Civil Service Union and the Inland Revenue Staff Federation are more sceptical, and acceptance of the offer even by some of the moderate unions is by no means secure.

Long-term damage to the machinery of Government done by the strike could be severe. The CPSA and the SCPS estimate that so far their campaign of selective strikes, aimed mainly at disrupting cash flow to the Government and to private industry, has halted payments totalling £960m (a figure that the Government disputes). All company searches and new company registrations have been halted. Payments to defence contractors, VAT repayments, farm subsidies, university and industry grants, repayment of National Savings Bonds and the issue of coinage have all been stopped.

Scottish courts have been closed down, Foreign Office and GCHQ Cheltenham communications halted, RAF maintenance work disrupted, and driving tests cancelled.

The VAT computer centre at Southend has been closed down for five weeks halting the processing of VAT returns. According to Mr. Denzil Davies, Treasury Minister, it has held up VAT repayments of £240m. The unions say the computer has to operate for 24 hours a day, seven days a week, in order to deal with day-to-day work. There is no computer time available to deal with the mounting backlog with any urgency, so that the computer may never catch up with the work lost.

The effectiveness of union action has stemmed partly from the growth of Civil Service work, and partly from the increasing use of computers in the Service. As legislation has grown more detailed and complicated, more staff has been needed to deal with it. In the past eight years, despite staff cuts and the hiving off of 5,000 museum staff, 7,300 Civil Aviation Authority staff and others, the number of non-industrial civil servants has risen from 493,000 in 1970 to 567,251 in April last year.

In 1970 there were 108 major administrative computers in the Service. Today the number has all but doubled to about 200. About 14,000 civil servants are engaged in computer work, though the unions have been able to achieve the effects they wanted merely by pulling out some of the 1,800 operations staff who throw the switches. At the Ministry of Defence computer at Liverpool, for example, which is responsible for the payment of all MoD central contracts to industry only eight were called out.

Both unions and the Civil Service Department agree that many of the industrial relations problems pointed out in the Wider Issues Review Team's report in 1975 have in fact been dealt with satisfactorily. But the present strikes confirm that the report's central finding still holds good: "Pay has been the single most important cause of discontent in the Civil Service—there remains a deep and growing anxiety about the future of Civil Service pay. The most important thing for the well-being of the Service is to keep its pay right."

An unusual view of Whitehall, headquarters of a restive British Civil Service.

Letters to the Editor

Buying on tick

From Lord Balogh.

Sir,—Samuel Brittan (March 29) ridicules the economists who pay attention to the current balance of payments. Does he not in his private life differentiate between income and borrowing? True enough, if the borrowing results in an offsetting increase in productive capacity, it is advantageous. But can he really maintain that Britain, as a country, has lately done so rather than buying foreign durable (mainly consumption) goods on tick?

Thomas Balogh.
Balliol College, Oxford.

Problem solved

From Mr J-C Koeune

Sir,—Hasn't the "unsolved theoretical problem" that Samuel Brittan uncovered on March 8—"Hopes, risks and a bit of theology"—already been raised and solved by Professor Robert Mundell?

In his "Capital mobility and stabilisation policy under fixed and flexible exchange rates" you will find, I think, "some rigorous professional discussion of these abstruse matters." Here's a sample quotation: "Assume an increase in Government spending financed by Government borrowing. The increased spending creates an excess demand for goods and tends to raise income. But this would increase the demand for money, raise interest rates, attract a capital inflow, and appreciate the exchange rate, which in turn would have a depressing effect on income. In fact, therefore, the negative effect on income of exchange rate appreciation has to offset exactly the positive multiplier effect on income of the original increase in Government spending.(...) Fiscal policy thus completely loses its force as a domestic stabiliser when the exchange rate is allowed to fluctuate and the money supply is held constant."

Jean-Claude Koeune.
53 Parklaan, 1980 Tervuren, Belgium.

Landlord and tenant

From the Press Officer, Small Landlords' Association.

Sir,—On March 26 "Justinian" rehearsed the sad story of the council tenant who lost his right to purchase his council house for one-fifth below its market value.

As he implies, no council tenant has the right to compel his landlord to sell to him. Nor has the private tenant. But in practice it often happens. The probability is that well over 1m dwellings in the private rented sector have been sold to sitting tenants at prices much more than one-fifth below the true value.

How does this come about? In the case of dwellings subject to "controlled" rents which have been frozen at between 35p and £2.70 per week since 1957, the sale often arises because the landlord cannot raise the finance for heavy repair bills. These properties get sold at about 10 per cent of the true value and the sitting tenant pockets a large capital gain which is not even subject to capital gains tax. Sometimes the landlord, suffering an impossible relationship with a tenant sells out in desperation and despair. Sometimes the tenant will deliberately aggravate that relationship in the hope of getting the property off the landlord cheaply.

All this arises because the Rent Act bestows indefinite security upon the tenant and his children and grandchildren and compounds this with uneconomic rents. So called "fair" rents cover about 20 per cent of true costs. Sales of "fair rented" dwellings to sitting tenants are usually at about one third of the true value of the property.

Supposing it was the other way about. Supposing the tenant instead of paying 80 per cent less than economic rent had to pay 80 per cent more. Supposing it was the tenant who was bonded indefinitely to the landlord and could only sever the tenancy agreement by paying the landlord two-thirds of the value of the property.

Parliament in general and the Labour Party in particular would be jumping up and down. But with the landlord in that position the Labour Party not only seeks to justify the Rent Act but intends to make it even more onerous upon the landlord.

Meanwhile, of course, landlords fortunate enough to get vacant possession either do not relet or seek to let outside the Rent Act through the loopholes of licences, holiday lets and company lets. Reprehensible says the Labour Party—these abuses must be stopped. It does not see that far from being abuses these loopholes are the only way the private landlord can retain his sanity and the value of his property.

G. F. Cutting,
Small Landlords' Association,
7 Rosedene Avenue, Streatham.

Reinstatement value

From Mr. P. James

Sir,—The judgment in Leppard v The Excess Insurance Company on February 28, reported in The Solicitors Journal of March 16, raises the unfair position that thousands of consumers are in vis a vis their household insurance.

The British Insurance Association and its member companies have been involved in a massive campaign to persuade people to insure their property for reinstatement value. This has brought in enormous amounts of additional premiums, mainly through their building society agents. This has been done in the certain knowledge that in insurance law they are under no obligation whatsoever to give reinstatement value, and in fact, the occasions when they would are few and far between.

What concerns me is what method, if any, can be adopted to refund the excess premium to the insured, who, at the insurance company's behest has insured for a value, which, in the event of a claim, they would not pay. Mr. Leppard has some small consolation in that at least the excess premium paid will be refunded, but of course, millions of people never have a claim and in consequence, vast amounts of premiums are being collected for which no corresponding indemnity is being granted.

The whole question of reinstatement value needs examination, for if the companies want the extra premium, they should at least guarantee payment of the sum insured.

Peter R. James.
102, Insley Gardens, Hucclecote, Gloucester.

Civil Service pensions

From the Managing Director, House Information Services.

Sir,—Civil Servants, in rejecting the Government's pay offer, keep very quiet about their indexed pensions which we all know will ruin the nation eventually. The private sector—to which they are always referring on matters of "comparability"—must find the money for them as long as it can while understanding and resenting the prognosis.

A. Barrie,
1, Cresswell Park, Blackheath.

Paying the piper

From Mr. J. Towler

Sir,—It is to be hoped that John Cherrington's sensible stance towards the Common Agricultural Policy (Lombard: March 27) and the European Economic Community will rub off on to the Conservative Party.

Although recent speeches by Shadow Ministers John Nott and John Biffen suggest that there are seeds of a common sense approach towards the EEC, there is still a great deal of ground to be covered. For far too long Tory attitudes on Europe have been ambiguous and, at times, distinctly "wet."

Moreover, as Britain is set to become the largest net contributor to the EEC budget, we would do well to heed the adage that "he who pays the piper calls the tune."

James Towler.
25 Moseley Wood Lane, Cookridge, Leeds.

Gambling and hedging

From the Managing Director, Commodity Analysis

Sir,—Mr. A. H. Hermann—your Legal Correspondent—in his otherwise excellent article on commodity dealing under the heading "Business and the Courts" (March 29) appears to have made some erroneous statements based on a misunderstanding of the difference between 'futures' and 'forward physical contracts', and to have spoilt a rather well written, clearly described article by adding his personal note on the ethics and economics of commodity trading.

The purchase, sale and transhipment of raw materials around the world is normally undertaken by merchants who from time immemorial have been criticised by either buyer or seller because prices are too high or too low. And that they have profited at the expense of the commodity. Nevertheless their function is necessary to conduct an ordered and smooth flow of trade. By necessity they have to buy and sell to and from each other. Very often the number of merchants involved between the original seller and the ultimate consumer may be numerous and if the delivery period is some time in advance they have to enter into forward contracts. These are normally described as 'forward physical contracts' with their ultimate fulfilment being by a payment for, and the delivery of, the goods. Sometimes if there are a number of people involved it is known as a 'string' or a 'chain' of transactions.

Mr. Hermann states that there "is the question of whether commodity futures of this type should be treated as real contracts of sale." It is important to note that these transactions are not 'futures'. Futures contracts are identical contracts in quantity and quality as traded on a futures exchange. The purchase and sale of futures contracts can be matched instantaneously and settlement can be made by the payment of differences. The fulfilment of the obligations of a futures contract (either the payment of the differences or the delivery of goods) is normally undertaken by a clearing house, whereas the fulfilment of the obligations of a forward physical contract are undertaken by the principals themselves. In referring to two types of commodity deals, as Mr. Hermann puts it "the supply on one hand and the gambling on the other" he seems to have become confused between futures and forward contracts.

The second point with which I would take issue is that he seems to be taking some sort of moral stance in his last sentence when he states "a fresh look at the commodity trade might prove useful to consumers and traders alike." I would like to point out that this is a subject which socially and economically has been taking issue for very many years and as recently as May 1977 there was printed by the House of Lords the Minutes of the Proceedings of the Select Committee on Commodity Prices which investigated the issue at great length and with which I suggest Mr. Hermann makes himself familiar as it dispelled a number of the clichés normally associated with commodities — namely the differences between speculatory gambling and hedging.

D. M. Anderson,
Commodity Analysis,
37-39 St. Andrews Hill, EC4

Balanced views

From the Managing Director, Executive Search

Sir,—During the damaging strikes we have suffered over the past few months, the trade union viewpoint has been thrust at us in the media by members of the TUC, trade union leaders, shop stewards and even picketing strikers. All those not so represented, and each one a loser, have not been heard in the same proportion.

Why cannot the CBI, the Institute of Directors, chairmen and managing directors, even individual managers, find a way of matching this presentation, speaking up to put over their views of the national interest, their aims for industry, and the results which can be expected by everyone from their approach to a disciplined, creative, productive, goal-oriented team effort?

Such a presentation will be the more necessary during a period of electioneering when politicians of all parties tend to blur the real industrial issues. Let people make up their minds on the basis of fair and equal representation in the media.

J. M. Reid,
Executive Search,
8a, Symons Street,
Sloane Square, SW3.

Today's Events

GENERAL

Mrs. Shirley Williams, Education Minister, speaks at Association of Professional, Executive, Clerical and Computer Staffs conference, Blackpool.

Herr Andreas von Buelow, West German Defence Minister, talks in London with British counterpart on security and alliance policy.

Overseas: EEC Foreign Ministers two-day meeting in Luxembourg to discuss international trade liberalisation (GATT).

EEC Finance Ministers meet in Luxembourg.

President Begin of Israel visits President Sadat of Egypt in Cairo.

OFFICIAL STATISTICS

Final February figures for retail sales; hire purchase and other instalment credit business for February, published by Department of Trade.

PARLIAMENTARY BUSINESS

House of Commons: Representation of the People Bill. Arbitration Bill (Lords), remaining stages. Crown Agents Bill, remaining stages. Consents to Prosecutions Bill, remaining stages. Pneumoconiosis, etc. (Workers' Compensation) Bill.

House of Lords: Industry Bill (Money), third reading. Nurses, Midwives and Health Visitors Bill, third reading. Banking Bill, remaining stages. Estate Agents Bill, remaining stages. Independent Broadcasting Authority Bill, second reading. Air Navigation Order. Carriage by Air Order.

Select Committee: Expenditure: Education, Arts and Home Office Sub-committee. Subject: Women and Penal System. Witnesses: Baroness Vickers and representatives of PROS, ECP and PLAN. Room 6, 4.15 pm.

COMPANY RESULTS

Final dividends: H. Brammer and Co. Erith and Co. Freemans (London SW9). I. and J. Hyman. Thomas Jourdan. KCA International. C. F. Lovell and Co. Low and Bonar Group. Macfarlane Group (Clansman). Mersey Docks and Harbour Co. Ocean Transport and Trading. Queens Moat Houses. Reckitt and Colman. Interim dividends: Scottish Metropolitan Property Company.

COMPANY MEETINGS

See Financial Diary on page 9.

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Stronger second half lifts Laird to £11.12m—pays maximum dividend

A SECOND half profit of £6.29m against £5.08m lifted Laird Group to a record £11.12m pre-tax for the 1978 year compared with £9.09m last time. Turnover for the full period was well up at £151m against £119.2m.

Earnings are shown as 15.32p (14.35p) per 25p share and the dividend is effectively stepped up to 2.982p (2.664p), the maximum *permitted, with a final payment* of 1.522p. Also proposed is a one-for-10 scrip issue.

After tax of £4.09m which includes £3.11m overseas—last year's charge £2.52m was all overseas—and an extraordinary debit of £690,000, the available balance came out lower at £6.33m (£6.57m).

The extraordinary items is the cost of placing subsidiary Western Shiprepairers on a care and maintenance basis, after tax.

The amount retained was £5.03m (£5.41m) after dividends *£1.3m against £1.16m.*

Net asset value per share is given as 124.3p (111.7p) at the year end.

The directors say that claims for compensation for the nationalisation of Scottish Aviation and Cammell Laird Shipbuilders were made over two years ago and have not yet been agreed. To date some £1.45m has been received on account.

Laird is also involved in metal industry, transport engineering, motor components, other engineering, etc.

● comment

Laird Group has come well up to expectations showing a 22 per cent rise in profits *last year* to £11.1m. Earnings have marginally *fallen because of the more* normal tax charge and the extraordinary costs of putting Western Shiprepairers on a care and maintenance basis. But the *underlying momentum is forward* on the back of heavy capital expenditure. The outstanding jump in sales has come from the transport engineering division; the rise from £27m to £48m reflects the pay-off on orders placed *some time ago.* More remarkable still is the profits jump on the metal industries side which has chipped in £1.9m this time against £¼m in 1977.

First half figures this year will be affected by the bad weather and the road haulage strike. The shares, at 117p on Friday, yield *less than most engineering* companies at 4½ per cent but the p/e at 7½ is comparable with the crowd.

BOARD MEETINGS

The following companies have notified dates of board meetings to the Stock Exchange. Such *meetings are usually* held for the purpose of considering dividends. Official indications are not available as to whether *dividends are* interims or finals and the sub-divisions shown below are based mainly on last year's timetable.

TODAY

Interims: Scottish Metropolitan Property.

Finals: H. Brammer, Erith, Freemans (London, S.W.9), T. and J. Hyman, Thomas Jourdan, KCA International, G. F. Lovell, Low and Bonar, Macfarlane Group (Clansman), *Mersey Docks* and Harbour, Ocean Transport and Trading, Queens Moat Houses, Reckitt and Colman.

FUTURE DATES

Interim:	
Low (Wm.)	April 19
Finals:	
Aurora	April 9
B.S.G.	April 20
Bank of Scotland	April 3
Berwick Timpo	April 12
Brown Boveri Kent	April 5
Channel Is. & Ind. Inv. Tst.	April 10
Chersonese (F.M.S.) Estates	April 4
East Rand Consolidated	April 5
Fothergill and Harvey	April 10
Lyon and Lyon	April 4
Owen and Owen	April 11
Rugby Portland Cement	April 23
Taylor Pallister	April 11

Goode Durrant sees increase

A PREDICITION that Goode Durrant and Murray Group, the international finance concern, will do better than the £900,000 *pre-tax profit in the year to* October 31, 1978, is made by Mr. Lionel Robinson, the chairman, in his annual statement.

He expects Rawlings Bros, a wholly-owned subsidiary which made a £48,000 profit against a £4.6m loss, to provide an increasing share of group profit.

The group's overseas operations continue to do well, he *adds. The store in New Zealand* —Kirkcaldie and Stains—has again achieved record profits and the Southern African and American confirming and financing operations also made substantial contributions.

The group has disposed of its Mozambique interests under a *sale agreement conditional* until July.

The *reduction in group net* borrowings—down from £16m to less than £1.5m—has followed the re-shaping of the UK businesses, he says. It has given the group a strong financial base from which to develop its traditional shipping, *confirming progress* already and we expect to do better this year, he concludes.

Meeting, Durrant House, EC, April 25, at 10 am.

Upsurge at A.B. Electronic

On sales ahead from £8.8m to £10.86m pre-tax profits of A.B. Electronic Products Group surged from £154,825 to £580,512 in the six months to December 31, 1978.

The directors state that they *expect full year figures to top* 1977's record £915,000. Profits *for 1978 fell to £604,000.*

Halfyear earnings per 25p share are shown to have risen from 2.8p to 13.7p and the interim dividend is lifted from 2p to 2.5p, payable on June 6.

Profit was after depreciation of £288,948 (£252,502) and interest of £142,698 (£81,532). Tax took £125,000 (£62,000).

More growth is expected, particularly in the field of thick-film *micro-circuits, but a combination* of UK inflation and the strength of the pound is causing increasing difficulty from foreign competition.

KENNING MOTOR

Kennings announces that 559,212 ordinary shares of 25p each have been issued pursuant to the conversion of £881,448 8 per cent convertible unsecured loan stock 1989/94.

The new shares will rank pari passu in all respects with the existing ordinary shares.

Application has been made to the Council of the Stock Exchange for the shares to be admitted to the Official List.

PRUDENTIAL ASSURANCE

In our report of Prudential's latest bonus rates (March 30), the rate for personal pension plans in force for 22 years was incorrectly stated as £565. The correct figure is £65.

Japanese funds for Nabarlek

BY KENNETH MARSTON, MINING EDITOR

WORK at Nabarlek, which is to be the first of Australia's major uranium deposits in the Northern Territory to be brought to production, is to get under way *in May-June now that Queensland* Mines has arranged financing of the project with its Japanese customers.

The Japanese power utilities, Shikoku Electric Power and Kyushu Electric Power, are to lend Queensland Mines a total A$74.75m (£41m). The companies are expected to buy about 60 per cent of Nabarlek's estimated potential output of 10,000 tonnes of uranium oxide.

It is intended to mine the whole orebody over about six months. The ore will then be stockpiled and processed over eight to ten years at a production rate of about 1,100 tonnes of uranium oxide a year.

Queensland Mines hopes by late-1980 to be producing enough of the yellowcake to meet its Japanese delivery contracts. They were signed back in 1972 and until now have been met by borrowings from the Australian Atomic Energy Commission.

Shikoku's president, Mr. T. Yamaguchi, has stressed that his *company is not seeking any* equity stake in Queensland Mines or participation rights in its exploration area.

UMAL EXPECTS A BETTER YEAR

This year should be "acceptably good" for both Utah Mining Australia (UMAL) and its 10.8 per cent-owned Utah Development. The last-named is Australia's largest coal producer and major revenue earner and is 89.2 per cent owned by America's Utah International.

The UMAL profit for 1978 declined to A$15.4m (£8.4m) from A$16.3m. However, the *company is making a three-for-*seven scrip issue. The shares were *unchanged* at 345p in London yesterday.

At the Sydney meeting the UMAL chairman, Mr. C. H. Rennie, added that he saw 1979 as a year of return to growth, although the rise was expected to be gradual in the near term.

ROUND-UP

Wankie Colliery, the Rhodesian coal producer in the Anglo American group, maintained its interim dividend at 3 cents (2.1p) for the year to August 1979. Total payments for 1977-78 were 9 cents. Net income in the six months to February was R1.59m (£1.1m), a slight decline on the R1.72m earned in the same period of the previous year, owing to accounting changes.

* * *

Last week's severe floods in north Yorkshire have not affected the controversial potash mine at Boulby of Charter Consolidated's Cleveland Potash. After its past chequered progress, the mine's fortunes are believed to have taken a turn for the better in recent months.

* * *

Agnico-Eagle, the Canadian precious metals producer, has declared an initial dividend of 10 US cents (4.86p) for 1978 after a record year when net profits were $2.6m (£1.28m) against a loss of $361,361 in 1978. Prospects are good for this year, the company indicated.

* * *

Conex Australia stated it had resolved its dispute over diamond exploration claims with Samantha Mines, Otter Exploration and the Selection Trust subsidiary, A.S. Mining Ventures. A bulk sampling programme will take place at what is now their joint prospect in the Kimberley *area of western Australia.*

Vantona expenditure plans

A corporate plan covering the next three years has recently been completed by individual management of the Vantona Group, Mr. James Spooner, the chairman, says in his annual report.

The board has sufficient confidence in the results of this exercise to confirm a programme of capital expenditure costing more than £10m in the next three years.

Both this and the *additional* working capital arising will be financed from internal sources, the chairman says.

The immediate future gives cause for concern, however, Mr. Spooner states. The first three months' sales and profits have been affected by industrial unrest *and the climate.*

So far the group has suffered very little loss of production, but deliveries have inevitably been held up. It is hoped that most of this backlog will be recouped as more normal conditions are restored.

For the rest of the year some faltering in demand because of possible reduction in purchasing *power is a distinct possibility,* so that any optimism as to the outcome for the year to November, 1979 has to be very guarded at this stage.

In 1977-78, profits before tax rose from £6.73m to £7.31m on turnover of £82.43m *against* £78.53m. CCA profit is reduced to £5.61m after adjustments for depreciation, £1.1m, cost of sales, £1.08m and gearing, £471,000.

Again the balance sheet is in a healthy state. After providing the £9.3m cash consideration for the Compton Webb shares as well as record capital expenditure of £2.5m group overdrafts at the year end amount to £3.6m.

Net current assets are slightly improved while total reserves again show a material improvement over last year in spite of having to bear a write-off of £3.8m goodwill arising on the acquisition of Compton Webb.

During the year, a subsidiary was involved in negotiations for the supply of cloth for use by the Iranian Army. No deliveries have yet been made.

If the arrangements are frustrated due to present circumstances in Iran, cloth to a value of £640,000 may have to be taken up with no immediate re-sale arrangements existing. It is not possible at present to estimate the eventual outcome of this matter.

However, the board is of the *opinion that no material loss will* be incurred and therefore no provision has been made in the accounts for any loss or claim which might arise.

Meeting, Manchester, April 24 at 2.30 pm.

Piran ginger group considers legal action

BY JAMES BARTHOLOMEW

THE DISSIDENT shareholders of Saint Piran would have succeeded in ousting the current board at the EGM last Friday if certain proxies cast on the boards side had been discounted as invalid, Mr. Max Lewinsohn, leader of the rebel group said yesterday.

Mr. Lewinsohn has been advised by Coopers and Lybrand, the scrutineers appointed by him, that there are grounds for regarding several of the biggest proxy votes as invalid. He is considering taking legal action to remedy the situation this week. Proceedings were "almost inevitable," he said.

It is the proxy votes sent by some of the seven offshore companies which have become so controversial. The dissident shareholders failed last week to obtain an injunction to prevent these companies voting because they had given information about their beneficial ownership which was allegedly unlikely to be true.

Mr. Lewinsohn conceded yesterday that some of the seven had presented valid proxies but claims that the disputed proxies represented something like 2m votes. The dissidents would have won the day if these votes were not counted as the board had a majority of 1.3m votes.

Mr. Lewinsohn claimed that shareholders had voted 3 to 1 in favour of throwing out the Board if the votes cast by all seven offshore companies and the *company controlled by* Mr. James Raper, a former chairman and the biggest single shareholder, were ignored.

Mr. Lewinsohn noted that at least six of the seven offshore companies had sent their votes *from London post boxes* despite the fact that the companies were registered variously in Hong Kong, Luxembourg and Panama.

Whether or not Mr. Lewinsohn actually does take legal action on the poll, the story is not over. The EGM last Friday was adjourned and will be resumed on Wednesday, April 11, at 2.00 pm.

In the year 1977-78, Fademac earned profit after tax of £1.2m. Profits for the first four months of 1978 are well ahead of the previous year.

Marley has also entered a 50/50 partnership with Eternit of Switzerland in a new company called Tagula. The company will commence production of concrete roof tiles for the rapidly expanding Brazilian market.

Initial investment in Tegula will total over £2½m. This will be the first major concrete roof tile plant in Brazil. Other possible sites are being investigated and it is expected that more factories will be opened over the course of the next few years.

Tegula has established a subsidiary company for the purpose of quarrying aggregates which will be necessary for roof tile production.

W. E. NORTON BUYS SITE

W. E. Norton (Holdings) has completed the purchase of a freehold property and development land comprising industrial premises at Haddenham, Aylesbury, Buckinghamshire. The vendors are private companies controlled by Mr. A. D. F. Creighton.

The consideration has been satisfied by the issue of 444,965 ordinary shares plus £150,000 cash, payable in three equal instalments on July 1, 1979, January 1, 1980 and July 1, 1980.

The property has been professionally valued at £235,000 on the basis of its existing use and its occupation by Norton, making full use of the land and buildings. The valuation excludes certain items of plant which are being purchased, in particular a 25-ton overhead travelling crane.

NO PROBES

The following proposed mergers are not to be referred to the Monopolies Commission:—

National Enterprise Board and parts of Vickers Offshore Engineering Group;

Comet Radiovision Services and Caledonian Holdings;

London and Midland Industrials and Caledonian Holdings;

Harris Queensway Group and Timberland.

MARLEY IN BRAZIL

Marley has increased its holding in Fademac Brazil from 36 per cent to 49 per cent with Eternit of Belgium as the joint partner.

Fademac is investing in excess of £11m to increase production capacities and guild a new flooring line to produce Marley's latest domestic flooring.

Marley's original investment in Fademac was £312,000. The success of the company has permitted a liberal dividend policy and Marley's capital has been more than repatriated by the receipt of dividends totalling £530,000.

LOCAL AUTHORITY BOND TABLE

Authority (*telephone number in parentheses*)	Annual gross interest	Interest payable	Minimum sum	Life of bond
	%		£	Year
Knowsley (051 548 6555)	12¼	½-year	1,000	5-7
Redbridge (01-478 3020)	11½	½-year	200	4-5
Sefton (051 922 4040)	11¾	½-year	2,000	5-7
Wrekin (0952 505051)	12½	yearly	1,000	6-10

Ahold seeking further acquisitions overseas

BY CHARLES BATCHELOR IN AMSTERDAM

AHOLD, HOLLAND'S largest supermarket chain, expects it will be difficult to maintain net profit margins in 1979. After a period of strong expansion the Dutch retail trade must now accept more moderate rates of growth and more effort will go into improving internal management, logistics and marketing, said Mr. Albert Heijn, the chairman.

Spending on foodstuffs in Holland this year is expected to rise by only 1-1.5 per cent following an increase of 3.5-4 per cent last year.

The company nevertheless plans to open a further 25 stores this year, in some cases replacing smaller stores. It has 670 outlets in Holland and 108 in the U.S. and Spain. It sees good prospects for its recent move into the operating of staff canteens, while its own food processing operations, which include a bakery and dairy, will increase sales to non-group retailers.

Following the takeover of the U.S. chain, Bi-Lo, in 1977, and its integration into the group, Ahold is now looking at other potential acquisitions abroad. It now makes 20 per cent of its sales and 22 per cent of its operating profits outside Holland. Sales of Bi-Lo, which has 103 stores in the South Eastern U.S., rose 15 per cent to $480m.

Bi-Lo profits, expressed in dollars, are expected to be unchanged in 1979 due to the slow rate of economic growth and rising inflation. The costs of opening 10 new supermarkets will also depress profits. In Spain, Ahold does not expect to start making profits until 1980. It hopes to open a further three stores this year, bringing the total to eight. Delays in gaining building permission for new outlets, often due to local political factors, have held back expansion. Sales rose 25 per cent to around Fl 10m last year.

The company will continue with the re-organisation of its 107 Simon de Wit discount stores in Holland this year. Tough competition from lower priced competitors in recent years led to a loss of market share, but profits are expected to improve this year after falling in 1978.

Ahold has now decentralised its operations into five largely autonomous divisions: retailing in Holland, the U.S. and Spain, food processing and restaurants and leisure parks. Each division has its own management which reports directly to the group Board.

Texaco sets Lifo rules on foreign inventories

By David Lascelles in New York

TEXACO, the third largest U.S. oil company, has extended last in first out (Lifo) accounting to its foreign inventories since the beginning of this year, the company announced at the end of last week.

Texaco has been applying Lifo accounting to domestic inventories of crude oil, petroleum and petrochemicals since 1974, but it decided to extend this form of accounting to foreign inventories so as to register the effect of increased costs on earnings more promptly, it said.

Most of the large U.S. oil companies have been using Lifo accounting for some years, and particularly since the last fuel price explosion in 1974.

In inflationary times, Lifo has the advantage of reducing tax liability, but at the cost of lowering profits as well. However, high profits have proved to be more of a curse than a blessing to oil companies at times of energy crises, and Lifo therefore serves a useful purpose when oil companies want to avoid accusations of profiteering.

Sluggish year for Advertiser Newspapers

By Our Sydney Correspondent

ADVERTISER Newspapers, the media printing and packaging group, was held by its media activities to a profit increase in 1978 of only 6.9 per cent. Earnings for the year to December 31 rose from A$8.9m to a record A$9.5m (U.S.$10.7m). The profit failed to keep pace with the growth in sales, which rose 14 per cent from A$83m to A$95m (U.S.$107m).

The group results rose only 1.3 per cent in the second half-year, after a gain of 16.7 per cent in the first six months. The directors warned at the half-way mark that the depressed advertising market would be reflected in lower media results for the full year; and the profit from the newspaper division fell 5.5 per cent for the year. The circulation of the Adelaide Advertiser, the major publication, dipped fractionally.

Scrip issue from BHP

BY JAMES FORTH IN SYDNEY

AUSTRALIA'S largest company Broken Hill Proprietary (BHP), has announced a one-for-five scrip issue—its first handout to shareholders since 1974. The issue comes only a few weeks after the company announced a sharp jump on profit for the November half-year to A$87m (U.S.$97m), or more than was earned in the full 1977-78 year.

The increase was largely due to a turnaround from losses to profits by the steel division—BHP is the country's only steel producer—and higher earnings from the oil and gas division. Demand for steel is improving and higher production and prices in the second half should lead to profit for the full year to May topping A$130m. On this basis earnings per share would have risen from 31 cents a share to more than 80 cents. On year-end capital increased by the scrip issue, it would still come out to almost 70 cents a share.

Avco profits move up

BY OUR SYDNEY CORRESPONDENT

AVCO FINANCIAL Services, one of Australia's leading shop front financiers, lifted its profit by 9 per cent, from A$10.3m to A$11.2m (U.S.$12.5m) in the year to November 30. The result followed an increase of almost 17 per cent in total receivables, from A$157m to A$183m, of which consumer loans accounted for A$163m compared with A$138m.

The volume of consumer loan business during the year rose from A$91m to A$104m. The average cost of borrowed funds edged up from 11.41 per cent to 11.93 per cent.

Cont. American has Canada bid

NEW YORK — Imperial Life Assurance of Canada plans to make a tender offer for Continental American Life Insurance for $33 a share cash.

The proposed offer would be conditioned upon Imperial receiving at least 404,027 shares of Continental American, 50.1 per cent of the total shares outstanding or issuable, subject to stock options, it said.

Imperial noted that it had been discussing a merger with Continental American since December, 1978, but that Continental American had deferred action on the proposal until May 1, 1979.

Reuter

PENDING DIVIDENDS

For the convenience of readers the dates when some of the more important company dividend statements may be expected in the next few weeks are given in the following table. The dates shown are those of last year's announcements, except where the forthcoming Board meetings (indicated thus*) have been officially published. It should be emphasised that the dividends to be declared will not necessarily be at the amounts or rates per cent. shown in the column headed "Announcement last year." Preliminary profit figures usually accompany final dividend announcements.

	Date	Announcement last year		Date	Announcement last year
Assocd. Biscuit Manufctrs.	Apr. 10	Final 1.88 fcst.	Minet	Apr. 27	Final 1.271
*Aurora	Apr. 9	Final 3.96	*Morgan Crucible	Apr. 5	Final 2.204
*Babcock and Wilcox	Apr. 12	Final 2.892	Mothercare	May 4	Final 1.904
*Bank of Scotland	Apr. 3	Final 5.449	Mowlem (John)	Apr. 20	Final 5.0
Barrow Hepburn	Mar. 8	Final 1.9331	Nat. and Comm. Bank	May 4	Int. 1.375
Blue Circle Inds.	Apr. 13	Final 6.4523	*Ocean Transport	Apr. 2	Final 4.3273
*Bowater	Apr. 5	Final 5.7864	Ofrex	Apr. 5	Final 2.34
British Home Stores	May 2	Final 3.473	*Pearl Assurance	Apr. 6	Final 8.735
*British Printing Corpn.	Apr. 5	Final 2.4 fcst.	Pearson Longman	Apr. 21	Final 4.236
*British Sugar	May 3	Int. 1.65	Pearson (S.)	Apr. 21	Final 4.809
*Brown Boveri Kent	Apr. 5	Final 1.0	P and O	May 3	Final 3.542
*Cadbury Schweppes	Apr. 5	Final 2.09143	Phoenix Assce.	Apr. 5	Final 5.77
*Cape Inds.	Apr. 8	Final 5.302	Ready Mixed Concrete	Apr. 13	Final 3.27
*Consd. Gold Fields	Apr. 4	Int. 3.1916	*Reckitt and Colman	Apr. 2	Final 5.95478
Coral Leisure	Apr. 20	Final 3.6 fcst.	*Reed (Austin)	Mar. 29	Final 1.858
*Croda Intnl.	Apr. 11	Final 1.192	*Rowntree Mackintosh	Apr. 9	Final 5.4175
Currys	Apr. 17	Final 4.54	*Rugby Portland Cement	Apr. 23	Final 1.808
*Dickinson Robinson	Apr. 10	Final 4.448	Sainsb'y (J.)	May 3	Final 3.987
Dunlop	Apr. 20	Final 2.65	*Scottish Met. Prop.	Apr. 2	Int. 0.9
Eagle Star	Apr. 12	Final 3.1262	Sears Hldgs.	May 4	Final 2.58
European Ferries	Apr. 26	Final 1.8	Simon Engineering	Apr. 24	Final 5.0652
Gerrard Nat. Discount	Apr. 26	Final 4.171	*Slough Estates	Mar. 28	Final 1.515
*Gill and Duffus	Apr. 10	Fin. 2.564 fcst.	*Smith (W. H.)	Apr. 11	Final 0.2978
*Glaxo	Apr. 9	Int. 4.5	*Smiths Inds.	Apr. 10	Int. 3.2853
*Glynwed	Apr. 11	Final 5.75	Smurfitt (Jefferson)	Apr. 27	Final 4.867
*Guardian Royal Exchange	Apr. 11	Final 5.9304	Spirax-Sarco	Apr. 3	Final 5.19
*Guest Keen and Nettlefolds	Apr. 5	Final 10.059	*Sun Alliance	Apr. 4	Final 9.245
Hammerson Prop. and Inv.	Apr. 28	Final 5.46	Tarmac	Apr. 27	Final 6.234
Hawker Siddeley	Apr. 18	Final 2.201	*Taylor Woodrow	Apr. 5	Fin. 6.4853 fcst
Hepworth (J.)	Apr. 21	Int. 0.72	*Telephone Rentals	Apr. 25	4.3
Hewden Stuart	Apr. 10	Final 0.8684	Tozer Kemsley & Millbourn	Apr. 25	Final 2.2702
*Howden (Alexander)	Mar. 29	Final 4.09	Travis and Arnold	Apr. 25	Final 3.1219
LWT	Mar. 30	Int. 3.555	UDS	May 4	Final 3.0
*Ladbroke	Apr. 5	Final 4.0	Vickers	Apr. 27	Final 5.0964
Laing (J.)	May 2	Final 1.869	Wadham Stringer	May 2	Final 1.21
*Lead Inds.	Apr. 11	Final 4.37	Wimpey (George)	Apr. 27	Final 0.6810.
*London Brick	Apr. 5	Final 1.9602			
*Law and Bonar	Apr. 2	Final 7.39			
Marks and Spencer	May 3	Final 2.544			
*Menzies (John)	Apr. 24	Final 1.34 fcst.			

* Board meetings intimated. † Rights issue since made. ‡ Tax free. § Scrip issue since made from reserves.

CORAL INDEX: Close 531-536

RECENT ISSUES

EQUITIES

Issue Price p	Amount Paid up	Latest Renunc. Date	1978/79 High	Low	Stock	Closing Price p	+or-	Div.	Times Covered	Gross Yield	P/E Ratio
§85	F.P.	—	194	150	‡Appl. Computer	180	.....	0.7	11.0	0.6	22.2
55	F.P.	20/3	174	66	Caledonian Hldgs.	146	+2	b7.5	1.6	6.3	14.8
**	F.P.	16/3	170	118	Hunting Assoc. Defd.	156	+6	.....	.....	.....	.....
**	F.P.	9/3	42	31	M.Y. Dart Defd.	40	+2	.....	.....	.....	.....
95*†	F.P.	20/4	122	97	Sedgwick F.New 10p	115	-5	T5.0	3.1	5.5	10.7

FIXED INTEREST STOCKS

Issue Price £	Amount Paid up	Latest Renunc. Date	1978/79 High	Low	Stock	Closing Price £	+or-
‡	F.P.	23/3	85p	53p	Chepstow Race's 8% Cnv. Uns. Ln. 1986	85p	.....
99¾	F.P.	—	99¼	99¼	Cleveland (County of) Var. Rate 1984	99¼	.....
$100	F.P.	—	105p	103p	Grant (James) 10¼% Pref.	105p	.....
96	£50	—	28	19¾	IOFC 13¼% Uns Ln 1992	24	-½
‡	F.P.	27/7	101½	99	Lee Valley Water 8% Red. Prf. 1985	101½	+½
72¼	F.P.	—	107p	105p	Lyles (S.) 11% Cum. Prf.	107p	.....
98	F.P.	—	79	70¼	MEPC 6½% Conv. Uns. Ln. 1995-2000	78¼	-1
‡	F.P.	14/6	101¼	97¼	Mid-Southern Water 8% Red. Prf 1984	101¼	+¼
‡	F.P.	9/5	106p	95p	Shaw Carpets 10½ 2nd Cum. Pref. £1	105p	.....
‡	F.P.	—	108p	106p	Tricoville 10¼% Pref.	108p	.....

"RIGHTS" OFFERS

Issue Price p	Amount Paid up	Latest Renunc. Date		1978/9 High	Low	Stock	Closing Price p	+or-
115	F.P.	30/3	20/4	160	147	Brammer (H.)	160	+3
60	F.P.	6/3	27/4	76	66	Burco Dean	82	+2
88	F.P.	20/3	27/4	117	108	Cement-Roadstone	108	-1
220	F.P.	14/2	6/4	302	258	Haslemere Estates	295	+1
33	F.P.	22/3	4/5	43	38	Hirst & Mallinson	42	+2
185	F.P.	18/3	18/5	233	210	Johnson Matthey	235	+5
67	F.P.	7/3	20/4	108	74½	Macpherson (D)	103	.....
44	Nil	—	—	25pm	25pm	Park Place Invs.	25pm	-1
225	F.P.	12/3	20/4	295	253	Rank Org.	288	-6
59	F.P.	23/2	18/4	79	73	Redman Heenan	78	+1
27	F.P.	14/3	25/4	37	35	Sekers Intl.	35	-1
315	F.P.	12/3	3/4	405	342	Taylor Woodrow	390	-8
32	Nil	—	—	34pm	32pm	Williams (W.)	32pm	.....

Renunciation date usually last day for dealing free of stamp duty. b Figures based on prospectus estimate. g Assumed dividend and yield. u Forecast dividend: cover based on previous year's earnings. F Dividend and yield based on prospectus or other official estimates for 1979. Q Gross. T Figures assumed. ‡ Cover allows for conversion of shares not now ranking for dividend or ranking only for restricted dividends. § Placing price to public. p‡ Pence unless otherwise indicated. ¶ Issued by tender. ‖ Offered to holders of ordinary shares as a "rights." ** Issued by way of capitalisation. §§ Reintroduced. ¶¶ Issued in connection with reorganisation, merger or take-over. ‖‖ Introduction. □ Issued to former preference holders. ■ Allotment letters (or fully-paid). ● Provisional or partly-paid allotment letters. ★ With warrants. †† Unlisted security.

BASE LENDING RATES

A.B.N. Bank	13 %	■ Hambros Bank	13 %
Allied Irish Banks Ltd.	13 %	■ Hill Samuel	§13 %
Amro Bank	13 %	C. Hoare & Co.	†13 %
American Express Bk.	13 %	Julian S. Hodge	14 %
A P Bank Ltd.	13 %	Hongkong & Shanghai	13 %
Henry Ansbacher	13 %	Industrial Bk of Scot.	13½%
Associates Cap. Corp.	14 %	Keyser Ullmann	13 %
Banco de Bilbao	13 %	Knowsley & Co. Ltd.	14½%
Bank of Credit & Cmce.	13 %	Lloyds Bank	13 %
Bank of Cyprus	13 %	London Mercantile	13 %
Bank of N.S.W.	13 %	Edward Manson & Co.	14 %
Banque Belge Ltd.	13 %	Midland Bank	13 %
Banque du Rhone et de la Tamise S.A.	13½%	■ Samuel Montagu	13 %
Barclays Bank	13 %	■ Morgan Grenfell	13 %
Bremar Holdings Ltd.	14 %	National Westminster	13 %
Brit. Bank of Mid. East	13 %	Norwich General Trust	13 %
■ Brown Shipley	13 %	P. S. Refson & Co.	13 %
Canada Perm't Trust	13 %	Rossminster	13 %
Cayzer Ltd.	13 %	Royal Bk. Canada Tst.	13 %
Cedar Holdings	13 %	Schlesinger Limited	13 %
■ Charterhouse Japhet	12½%	E. S. Schwab	14 %
Choulartons	13 %	Security Trust Co. Ltd.	14 %
C. E. Coates	13 %	Shenley Trust	15 %
Consolidated Credits	13 %	Standard Chartered	13 %
Co-operative Bank	*13 %	Trade Dev. Bank	13 %
Corinthian Securities	13 %	Trustee Savings Bank	13 %
Credit Lyonnais	13 %	Twentieth Century Bk.	14 %
The Cyprus Popular Bk.	13 %	United Bank of Kuwait	13 %
Duncan Lawrie	13 %	Whiteaway Laidlaw	13½%
Eagil Trust	13 %	Williams & Glyn's	13 %
English Transcont.	13½%	Yorkshire Bank	13 %
First Nat. Fin. Corp.	15 %		
First Nat. Secs. Ltd.	14 %		
■ Antony Gibbs	13 %		
Greyhound Guaranty	13 %		
Grindlays Bank	‡13 %		
■ Guinness Mahon	13 %		

■ Members of the Accepting Houses Committee.
* 7-day deposits 10½%. 1-month deposits 10¾%.
† 7-day deposits on sums of £10,000 and under 10½% up to £25,000 11% and over £25,000 11¼%.
‡ Call deposits over £1,000 10½%.
§ Demand deposits 11%.

INSURANCE BASE RATES

† Property Growth 12%
† Vanbrugh Guaranteed 10.50%
† Address shown under Insurance and Property Bond Table.

CLIVE INVESTMENTS LIMITED
1 Royal Exchange Ave., London EC3V 3LU. Tel.: 01-283 1101.
Index Guide as at March 20, 1979 (Base 100 on 14.1.77)
Clive Fixed Interest Capital 148.52
Clive Fixed Interest Income 121.50

ALLEN HARVEY & ROSS INVESTMENT MANAGEMENT LTD.
45 Cornhill, London, EC3V 3PB. Tel.: 01-623 6314.
Index Guide as at March 29, 1979
Capital Fixed Interest Portfolio 111.50
Income Fixed Interest Portfolio 103.75

CURRENCIES, MONEY and GOLD

Sterling and the EMS

BY COLIN MILLHAM

Sterling, the only Common Market currency outside the European Monetary System, was the cause of more problems last week than any of the currencies actually embraced by the system.

The reason was the pounds link with the Irish punt, which the Irish central bank was forced to break on Friday morning. Trading in the punt was suspended at the same time, as the Irish currency rose above its highest permitted level against the weakest member of the EMS, the Belgian franc. Later on trading resumed, and after intervention the punt retreated behind the Italian lira and Danish krone, even though sterling continued to rise.

For the first time since the system began on March 13, the punt had been the strongest member. It displaced the Italian lira, which during the early part of the week had vied with the Danish krone for the position at the head of the EMS.

When the EMS was first suggested by the leaders of France and Germany it was the fear of the strain on weak currencies which made Britain, Ireland and Italy hesitant about joining. It therefore seems somewhat perverse that the currencies of three of the poorer members of the EEC should have appreciated sharply, while the German Dmark has depreciated.

Apart from this the new system does bear some comparison with the old European currency snake. Over recent months the Danish krone was the strongest member of the snake, and the Belgian franc the weakest. Last Monday and Tuesday the krone was the strongest member of the EMS, but retreated behind the Italian lira on Wednesday and Thursday.

The Dutch guilder, French franc, Dmark and Belgian franc have all depreciated from their central rates, while the lira, krone and punt have appreciated. Over the course of last week the movement of currencies from their central European currency unit rates tended to widen, with the three strongest currencies increasing the lead over their weaker brethren.

CURRENCY RATES

March 28	Bank rate %	Special Drawing Rights	European Currency Unit
Sterling	13	0.622013	0.653132
U.S. $	9½	1.28682	1.35172
Canadian $	11¼	1.49348	1.56773
Austria Sch.	3¾	17.6282	18.5118
Belgian F.	6	38.0127	39.9434
Danish K.	8	6.68053	7.01814
D mark	3	2.40327	2.52529
Guilder	6½	2.59166	2.72291
French Fr.	9½	5.52947	5.80903
Lira	10½	1080.80	1135.45
Yen	3½	269.331	283.456
Nrwgn. K	7	6.57308	6.90325
Spanish Pes.	8	87.7586	92.3855
Swedish Kr.	6½	5.62533	5.90662
Swiss Fr.	1	—	2.28820

GOLD

	Mar. 30	Mar. 29
Gold Bullion (fine ounce)		
Close	$238¼-239 (£115.4-115.8)	$241-241½ (£117.2-117.6)
Opening	$240-240½ (£116.5-116.8)	$241½-242½ (£117.7-118.1)
Morning fixing	$239.55 (£116.081)	$241.60 (£117.699)
Afternoon fixing	$240.10 (£116.878)	$241.50 (£117.564)
Gold Coins, domestically		
Krugerrand	$254¼-256¼ (£123-130)	$261-263 (£127-128)
New Sovereigns	$68-70 (£33-34)	$68½-70½ (£33½-34½)
Old Sovereigns	$74½-76½ (£36-37)	$74½-76½ (£36½-37½)
Gold Coins, internationally		
Krugerrand	$245½-248½ (£118½-119½)	$247½-249½ (£120½-121½)
New Sovereigns	$62-64 (£30-31)	$62½-64½ (£30½-31½)
Old Sovereigns	$74½-76½ (£36-37)	$74½-76½ (£36½-37½)
$20 Eagles	$316-321	$314-319
$10 Eagles	$176-181	$172-177
$5 Eagles	$131-136	$120-125

OTHER MARKETS

Mar. 30	£	$		£ Note Rates
Argentina Peso	2379-2399	1152-1157	Austria	27¼-28¼
Australia Dollar	1.8475-1.8525	0.8945-0.8970	Belgium	60¾-61¾
Brazil Cruzeiro	47.22-48.22	22.85-23.35	Denmark	10.58-10.68
Finland Markka	8.31-8.325	3.9770-3.9790	France	8.73-8.83
Greek Drachma	74.718-76.532	36.16-37.05	Germany	3.78-3.88
Hong Kong Dollar	10.30-10.35	4.9870-4.9920	Italy	1,695-1,735
Iran Rial	146.20-156.20	72-75	Japan	425-435
Kuwait Dinar (KD)	0.563-0.573	0.2758-0.2759	Netherlands	4.07-4.17
Luxembourg Frc.	61.15	29.58-29.60	Norway	10.41-10.51
Malaysia Dollar	4.55-4.57	2.2030-2.2125	Portugal	94-100
New Zealand Dlr.	1.9580-1.9540	0.9480-0.9510	Spain	139.5-144.5
Saudi Arab. Riyal	6.87-6.97	3.3600-3.3610	Switzerland	3.40-3.50
Singapore Dollar	4.51-4.53	2.1815-2.1825	United States	2.0500-2.0600
Sth. African Rand	1.74-1.75	0.8420-0.8470	Yugoslavia	39.5-43

Rate given for Argentina is free rate.

THE DOLLAR SPOT AND FORWARD

March 30	Day's spread	Close	One month	% p.a.	Three months	% p.a.
UK†	2.0585-2.0729	2.0655-2.0665	0.40-0.30c pm	2.03	0.75-0.65 pm	1.35
Ireland†	2.0545-2.0585	2.0545-2.0555	0.40-0.30c pm	2.04	0.75-0.65 pm	1.36
Canada†	86.20-86.25	86.20-86.23	0.07-0.05c pm	0.83	0.14-0.11 pm	0.58
Nethlnd.	2.0130-2.0155	2.0130-2.0150	0.64-0.54c pm	3.52	1.90-1.80 pm	3.67
Belgium	29.52-29.56	29.54-29.56	8½-7½c pm	3.25	23-21 pm	2.98
Denmark	5.1925-5.1970	5.1925-5.1940	0.50ore pm-par	0.58	0.25-0.75dis	−0.38
W. Ger.	1.8670-1.8690	1.8680-1.8690	0.90-0.80pf pm	5.46	2.62-2.52 pm	5.50
Portugal	48.15-48.35	48.18-48.28	35-60c dis	−10.57	100-165dis	−10.99
Spain	68.00-68.40	68.00-68.05	1-11c dis	−1.06	15-25 dis	−1.18
Italy	839.60-840.00	839.80-840.00	0.60-0.90 lire dis	−1.07	1.60-2.10dis	−0.88
Norway	5.1050-5.1080	5.1060-5.1070	0.80-0.30ore pm	1.29	2.15-1.65 pm	1.49
France	4.2960-4.3000	4.2980-4.3000	1.10-1.00c pm	2.93	3.05-2.90 pm	2.77
Sweden	4.3695-4.3720	4.3695-4.3705	0.70-0.50ore pm	1.65	2.10-1.90 pm	1.83
Japan	209.60-209.90	209.60-209.80	0.80-0.70y pm	4.29	2.20-2.10 pm	4.10
Austria	13.69½-13.71	13.70½-13.71	6½-6gro pm	5.58	19½-17½ pm	5.40
Switz.	1.6910-1.6935	1.6925-1.6935	1.45-1.35c pm	9.92	4.25-4.15 pm	9.92

† UK, Ireland and Canada are quoted in U.S. currency. Forward premiums and discounts apply to the U.S. dollar and not to the individual currency.

THE POUND SPOT AND FORWARD

March 30	Day's spread	Close	One month	% p.a.	Three months	% p.a.
U.S.	2.0585-2.0729	2.0655-2.0665	0.40-0.30c pm	2.03	0.75-0.65 pm	1.36
Canada	2.3900-2.4050	2.3930-2.3990	0.30-0.20c pm	1.25	0.55-0.45 pm	0.83
Nethlnd.	4.14-4.18	4.16-4.17	2⅞-1⅞c pm	5.40	5⅝-4⅝ pm	4.92
Belgium	60.80-61.30	61.10-61.20	30-20c pm	4.90	70-60 pm	4.25
Denmark	10.69½-10.76½	10.72½-10.73½	3¼-1¾ore pm	2.52	3½-1½ pm	0.93
W. Ger.	3.84-3.88	3.85¾-3.86¾	7⅞-6⅞pf pm	7.38	7-6 pm	6.73
Portugal	99.10-100.0	99.55-99.85	50-110c dis	−9.63	120-250 dis	−7.42
Spain	140.35-142.10	140.40-140.50	30c pm-15c dis	0.64	50 pm-50 dis	par
Italy	1,728-1,740	1,734½-1,735½	2 lire pm-par	0.69	3-1 pm	0.46
Norway	10.51-10.58	10.54½-10.55½	3¾-1¾ore pm	0.31	8¾-6¾ pm	0.28
France	8.84-8.91	8.87½-8.88½	3¾-2¾c pm	4.39	9¾-8¾ pm	3.94
Sweden	9.00-9.05½	9.02½-9.03½	3¼-1¼ore pm	2.99	7¾-5¾ pm	2.99
Japan	428-435	433-434	2.65-2.15y pm	6.64	6.35-5.85	5.63
Austria	28.17-28.40	28.30-28.35	22-12gro pm	7.20	53-43 pm	6.78
Switz.	3.47-3.52	3.49¾-3.50¾	3½-2½c pm	11.19	10½-9½ pm	10.99

Belgium rate is for convertible francs. Financial franc 62.35-62.45. Six-month forward dollar 0.92-0.82c pm: 12-month 1.50-1.40c pm.

EXCHANGE CROSS RATES

Mar. 30	Pound Sterling	U.S. Dollar	Deutschem'k	Japan'se Yen	French Franc	Swiss Franc	Dutch Guild'r	Italian Lira	Canada Dollar	Belgian Franc
Pound Sterling	1.	2.066	3.863	433.5	8.880	3.503	4.165	1735.	2.399	61.15
U.S. Dollar	0.484	1.	1.870	209.8	4.298	1.695	2.016	839.8	1.161	29.60
Deutschemark	0.259	0.535	1.	112.2	2.299	0.907	1.078	449.2	0.621	15.83
Japanese Yen 1,000	2.307	4.766	8.910	1000.	20.48	8.080	9.608	4002.	5.533	141.1
French Franc 10	1.126	2.327	4.350	488.2	10.	3.944	4.690	1954.	2.701	68.86
Swiss Franc	0.286	0.590	1.103	123.8	2.535	1.	1.189	495.4	0.685	17.46
Dutch Guilder	0.240	0.496	0.927	104.1	2.132	0.841	1.	416.6	0.576	14.68
Italian Lira 1,000	0.576	1.191	2.226	249.9	5.118	2.019	2.401	1000.	1.382	35.24
Canadian Dollar	0.417	0.861	1.610	180.7	3.702	1.460	1.737	723.4	1	25.50
Belgian Franc 100	1.635	3.379	6.316	709.9	14.52	5.728	6.811	2837.	3.922	100.

LONDON MONEY RATES

Mar. 30 1979	Sterling Certificate of deposit	Interbank	Local Authority deposits	Local Auth. negotiable bonds	Finance House Deposits	Company Deposits	Discount market deposit	Treasury Bills Φ	Eligible Bank Bills Φ	Fine Trade Bills Φ
Overnight	—	5-13⅝	—	—	—	—	12-15	—	—	—
2 days notice	—	—	13⅛	—	—	—	—	—	—	—
7 days or	—	—	—	—	—	—	—	—	—	—
7 days notice	—	12½-13⅛	13¼	—	13	13¼	12¾	—	—	—
One month	12⅞-12⅜	12⅞-12¾	12⅞-12¾	12⅝-12¾	13	13¼	12¾	11-11⅛	12½	13¼
Two months	12⅝-12½	12⅞-12⅝	—	12⅛-12½	12¾	—	12	11⅝	12½	12¼
Three months	12⅛-12	12⅛-12	12¼-12⅛	11⅝-12	12⅝	12⅝	12½	11⅝	12	12½
Six months	11⅝-11⅞	11½-11⅝	11¾-11⅞	10⅝-11⅛	12	—	—	—	10⅞	12
Nine months	11⅛-10⅞	11⅛-11¼	—	10⅞-11¼	11⅞	—	—	—	—	—
One year	10⅞-10¾	11-11⅛	11⅝	10⅞-11¼	11¾	—	—	—	—	—
Two years	—	—	12-12⅛	—	—	—	—	—	—	—

Local authority and finance houses seven days' notice, others seven days' fixed. *Long-term local authority mortgage rates nominally three years 12-12¼ per cent; four years 12½-12¾ per cent; five years 12¾ per cent. Φ Bank bill rates in table are buying rates for prime paper. Buying rates for four-month bank bills 11½ per cent; four-month trade bills 12½ per cent.

Approximate selling rates for one-month Treasury bills 11¾ per cent, two-month 11¾ per cent, three months 11¾ per cent. Approximate selling rate for one-month bank bills 12⅛ per cent; two-month 12¼ per cent and three-month 11⅞ per cent, one-month trade bills 13⅛ per cent; two-month 12⅞ per cent, and three-month 12⅞ per cent.

Finance Houses Base Rates (published by the Finance Houses Association) 13 per cent from April 1, 1979. Clearing Bank Deposit Rates for small sums at seven days notice 10.5 per cent. Clearing Bank Rates for lending 13 per cent. Treasury Bills: Average tender rates of discount 11.4337 per cent.

MONEY RATES

NEW YORK

Prime Rate	11.5-11.75
Fed Funds	10
Treasury Bills (13-week)	9.41
Treasury Bills (26-week)	9.38

GERMANY

Discount Rate	4
Overnight Rate	5.30
One month	5.20
Three months	5.35
Six months	5.55

FRANCE

Discount Rate	9.5
Overnight Rate	6.625
One month	6.8125
Three months	7.0625
Six months	7.3125

JAPAN

Discount Rate	3.5
Call (Unconditional)	4.75
Bills Discount Rate	4.8125

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The week in Parliament

TODAY

COMMONS: Proceedings on the Representation of the People Bill. Completion of Remaining Stages of the Arbitration Bill (Lords), the Crown Agents Bill and of the Consents to Prosecutions Bill and proceedings on the Pneumoconiosis Etc. (Workers' Compensation) Bill.

LORDS: Industry Bill (Money) third reading. Nurses, Midwives and Health Visitors Bill, third reading. Banking Bill, remaining stages. Estate Agents Bill, remaining stages. Motions to approve the White Fish subsidy (Deep Sea Vessels) (Specified Ports) Scheme, 1979. Air Navigation (Noise Certification) Order 1979. Carriage by Air Acts (Application of Provisions) (Second Amendment) Order 1979. Credit Unions Bill, second reading.

SELECT COMMITTEE: Expenditure, Arts and Home Office Sub-Committee. Subject: Women and the Penal System.

TOMORROW

COMMONS: Proceedings on the Finance Bill and on the Consolidated Fund (Appropriation) Bill. Completion of remaining stages of the Weights and Measures Bill, the Leasehold Reform Bill and Carriage by Air and Road Bill (Lords).

WEDNESDAY

COMMONS: Banking Bill, consideration of Lords amendments. Nurses, Midwives and Health Visitors Bill, Lords amendments. Estate Agents Bill, Lords amendments. Proceedings on the Ancient Monuments Bill (Lords) and on three consolidation measures, the Exchange Equalisation Account Bill (Lords), the International Monetary Fund Bill (Lords) and the Prosecution of Offences Bill (Lords).

LORDS: Motion to approve Inmarsat (Immunities and Privileges) Order 1979. Consolidated Fund (Appropriation) Bill, Finance Bill, Weights and Measures Bill and Leasehold Reform Bill, all stages. Crown Agents Bill, Consents to Prosecutions Bill and the Pneumoconiosis Etc. (Workers' Compensation) Bill, remaining stages.

Royal Assent will be given to all outstanding Acts and Parliament will then be prorogued prior to dissolution on Saturday, April 7.

BUSINESSMAN'S DIARY

UK TRADE FAIRS AND EXHIBITIONS

Date	Title	Venue
Current	London Fashion Exhibition (01-385 1200) (until April 5)	Olympia
Current	The Scottish Hotel, Catering and Licensed Trade Exhibition (031 229 6412) (until April 6)	Kelvin Hall, Glasgow
Current	International Engineering Inspection and Quality Control Exhibition (01-300 3200) (until April 6)	Exbn. Centre, Birmingham
Apr. 3—6	Leatherwear International (01-385 1200)	Olympia
Apr. 3—5	Computermarket '79 (01-935 4996)	Bloomsbury Centre Htl. WC1
Apr. 3—6	OCCA Technical Exhibition (01-908 1086)	Alexandra Palace
Apr. 5—8	Tipping Vehicle Exhibition (061-834 7648)	Exbn. Centre, Harrogate
Apr. 6—17	Birmingham Motor Show (0602 51202)	Bingley Hall
Apr. 9—14	Ideal Homes Exhibition (031 225 9657)	Assembly Rooms, Edinburgh
Apr. 18—21	National Food Services (01-686 7181)	Grosvenor House, W1

OVERSEAS TRADE FAIRS AND EXHIBITIONS

Current	Travel and Holiday Fair '79 (01-486 1951) (until April 8)	Helsinki
Current	Europain '79 (01-439 3964) (until April 9)	Paris
Current	Toys and Games Trade Show—BELJOUETS (until April 8)	Brussels
Apr. 5—8	International Coffee Exhibition	Genoa
Apr. 8—10	MODEXPO—International Ladies' Fashion Fair	Zurich
Apr. 14—23	International Trade Fair	Milan
Apr. 19—25	International Book Fair	Jerusalem
Apr. 20—29	International Household Fair	Amsterdam
Apr. 21—29	AGRO '79—Northern Agricultural Fair	Braga

BUSINESS AND MANAGEMENT CONFERENCES

Current	Management Centre Europe: Management Course (until Apr. 6)	London
Current	IPM: Industrial Relations Law: The impact of current legislation (01-387 2844) (until June 7)	Upper Woburn Place, WC1
Current	BTSC: Senior Management Course (04862 5444) (until April 28)	Woking, Surrey
Apr. 2	AMR International: Interviewing Skills and Techniques for Executives (01-262 2732)	Royal Garden Hotel, W8
Apr. 2	ESC: Important Developments in the Protection of Industrial Designs (057 282 2711)	Hilton Hotel, W1
Apr. 2—4	ASM: Managing and Controlling R and D projects (01-385 1992)	RAC Club, SW1
Apr. 2—4	MSS Computer and Business Consultancy: Effective Marketing and Selling (0903 34755)	Worthing
Apr. 2—6	Frank Jefkins: Export PR/Planned Press Relations (01-657 2911)	Connaught Rooms, WC2
Apr. 3	Executant Conferences: Justifying and Selecting Automatic Test Equipment (0494 33171)	Hotel Russell, WC2
Apr. 3—5	Energy Utilisation and Conservation Conference (01-637 2400)	Royal Lancaster Hotel, W2
Apr. 3	NTIS: Information Services (0420 84300)	American Embassy
Apr. 3	Kwaliteitsdienst-KDI: Effective Material Utilisation	Hilton Hotel, Rotterdam
Apr. 3—6	BACIE: Training Design (01-636 5351)	Regent's Park, W1
Apr. 4	The Spring Research and Manufacturers' Association: Health and Safety in the Spring Industry (0742 760771)	Europa Lodge Htl., W. Brom.
Apr. 4—5	Graham and Trotman: Saudi Arabia and Egypt: Current and Future Business Opportunities (01-493 6351)	Cafe Royal, W1
Apr. 4—6	BHRA: Institution of Chemical Engineers: Mixing (0234 750422)	University of York
Apr. 4—6	ISBA: World Industrial Advertising Congress (01-222 6362)	Amsterdam
Apr. 4—6	International Insurance Conference (01-222 6362)	Plaza Hotel, Frankfurt
Apr. 5—6	Assoc. of Offshore Diving Contractors: Underwater Engineering Symposium (01-549 5831)	University of Aberdeen
Apr. 6	Oyez-IBC: Damages for Personal Injury and Death (01-242 2481)	Royal Lancaster Hotel, W2
Apr. 9	The 48 Group: Trends in British Trade with China (0772 51831)	Guild Hall, Preston
Apr. 10	AGB: Trade Union Recognition—the options (01-353 3651)	London Press Centre
Apr. 10	The Institution of Mechanical Engineers: Power from Coal (01-222 7899)	Birdcage Walk, SW1
Apr. 11	LCCI: Conference on Libya (01-248 4444)	Cannon Street, EC4
Apr. 11	The Henley Centre for Forecasting: The Budget (01-236 3011)	Carlton Tower Hotel, SW1
Apr. 11	BAMA: Achieving production efficiency (0703 842765)	Kensington Close Hotel, W8
Apr. 14—21	CBA/John Ridgway: Training Course (01-720 7711)	Ardmore
Apr. 18—19	IMPI/AMEDA: Microwave—a Cooking Revolution (0582 411001)	London, W8
Apr. 18	AGB: Executive Secretary (01-353 3651)	Charing Cross Hotel, WC2
Apr. 18—20	Eurotech Management Development Service: Be a More Effective and Persuasive Communicator (0252 313066)	Cafe Royal, W1
Apr. 19	AGB: Essentials of Employment Law (01-353 3651)	Cafe Royal, W1
Apr. 19—20	FT Conference: South East Asian Banking and Finance (01-236 4382)	Singapore
Apr. 19—20	MSS Computer and Business Consultancy: Manufacturing/Production Control Concepts (Worthing 34755)	Worthing
Apr. 19—20	Malaysian Investment Centre: Assisting UK Businessmen in the Expansion of Trade and Investment Opportunities in Malaysia (01-493 0616)	Piccadilly Hotel, Manchester
Apr. 20—23	IPM: Current and Future Developments in Pay Policy and Industrial Relations Practice (0865 735422)	Kennington, Oxford

INTERNATIONAL BONDS

BY FRANCIS GHILES

The Canadian dollar comeback

ANOTHER startling week for the prices of Sterling bonds and of dollar bonds convertible into British equities, also saw the re-emergence of the primary market in fixed interest Eurodollar bonds and—after a long absence—of new issues in Canadian dollars. Meanwhile conditions in the "hard currency" market, which ruled the roost last year, continued to deteriorate.

The Canadian dollar sector of the market was re-opened after being closed for 18 months. All indications at the end of last week pointed to a warm reception for the two Canadian dollar issues, for Canada's Export Development Corporation and Hudson's Bay Co. which were announced on Tuesday. The Hudson's Bay issue was increased from an initial C$40m to C$50m later in the week. A third issue, for Province of Quebec, was announced on Friday evening.

The total size of the EDC bond is C$100m of which C$50m has been issued in the traditional way while a further C$50m remains for issue between now and the end of the year at the discretion of the borrower.

The coupon and maturity will be the same regardless of when the individual bonds are issued, with changes in market conditions being taken into account by altering the issue price.

The only other occasion when such a "quasi-tap" issue was arranged was in September 1977, by Orion Bank, one of the joint lead managers in the EDC issue, for Oesterreichishe Kontrollbank.

The reopening of this sector was made possible by the improvement in the Canadian currency since the beginning of March. It then stood at C$0.83 aginst the U.S. dollar but had moved up to C$0.86 by last Friday. This improvement is reinforced for the investor by the higher yield he can get on the new Canadian dollar issues than on recent U.S. dollar issues.

Electricite de France reopened the dollar sector of the straight Eurobond market with a $75m offering. A $40m straight issue for Comalco was then announced later in the week.

The reception for EDF was fair, not least on account of the rarity of the name, but some retail investors objected to the fact the bonds could be redeemed after three years at a price of 100½. Many felt higher yields were available for three years in other types of paper.

Turnover of seasoned dollar bonds was said by dealers to be average. Against the background of a firm dollar and easing interest rates the declining yield premium offered by money market instruments may be diverting some funds back into bonds. This consideration appears to outweigh the more bearish ones, such as the U.S. rate of inflation and further increases in the price of oil.

The announcement of oil price increases and the threat of further rises in inflation and interest rates again troubled the Yen, D-Mark and Swiss franc sectors. Prices of D-Mark bonds fell by an average of ½ point across the board in very thin trading after the announcement that both the discount and Lombard rates would go up by a full point in Germany.

Some German bankers also felt that the new D-Mark issue calendar for the four weeks starting March 26, which was set at a maximum of DM 770m, was too high.

The deteriorating state of this market was confirmed by the terms for RENFE and particularly by those for the Fujitsu convertible which carries a coupon of 5 per cent, the highest for a DM denominated Japanese convertible for a long time.

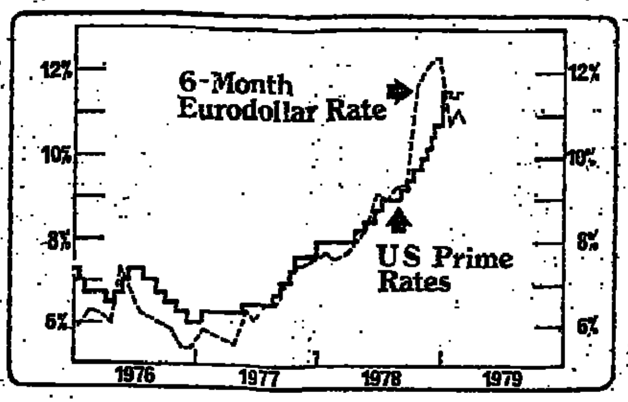
In the Swiss franc sector, too, the Japanese are having to pay more on convertibles: Rhythm Watch paid 3¾ per cent instead of the recently prevailing 3½ per cent. The big three Swiss banks decided to freeze the issue of subsequent Japanese convertibles.

The bad state of the Swiss bond market forced Banque Keyser Ullmann en Suisse to announce a coupon of 5 per cent on the SwFr 40m 10-year public issue it is arranging for Lonrho. The level of the coupon was at least ½ of a point above what was expected a week before.

The deterioration of the Yen sector was reflected in the decision by the Japanese authorities to curtail Yen bond issues planned for the next two months. This forced both Denmark and Austria to scale-down their plans for Yen bond issues next month.

In the sterling sector gains of up to 3½ points were registered on the week. The recent issue for FFI closed at 103 on Friday. The excitement on the British stock market coupled with the strength of sterling showed through clearly in the prices of UK dollar convertibles. The Thorn issue closed at the end of the week at 122, up from 103 at the beginning of March. On Thursday morning this security put on 10 points in as many minutes.

In the French franc sector the FFr 125m bond for Solvay was priced at par and a half. It was four times over-subscribed.



Hungary is to borrow $300m by way of a syndicated loan paying ¼ to ½ above U.S. prime rate rather than LIBOR. The chart shows why this could be more attractive to U.S. banks. The loan is being managed by Manufacturers Hanover Group of the U.S.

CURRENT INTERNATIONAL BOND ISSUES

Borrowers	Amount m.	Maturity	Av. life years	Coupon %	Price	Lead manager	Offer yield %
U.S. DOLLARS							
‡†Texas Int. Airlines	35	1986	6.2	7¶	100	CSFB, Kidder Peabody, Smith Barney	7.12¶
‡§Esselte	25	1989	—	7½	100	Hambros, Skand. Enskilda	7.75
†Bank Bumiputra	30	1984	5	6¼¶	100	Eur. Banking Co. & others	6.61¶
†Banco di Roma	50	1987/91	—	6¶	100	Crédit Lyonnais & others	6.09¶
§Galveston-Houston Int.	20	1994	12.8	8¾/9	*	Kidder Peabody	*
††Sweden	150	1986	7	9¼	*	Salomon Bros.	*
‡EDF (g'teed France)	75	1986	7	9½	100	Société Générale	9.625
Comalco	40	1991	9.38	10¼	*	Morgan Stanley Int.	*
D-MARKS							
Credit National (g'teed France)	100	1989	8	6½	99½	WestLB	6.57
‡RENFE (g'teed Spain)	100	1987	8	7	99½	WestLB	7.07
**S. African Oil Fund	50	1983	bullet	8	*	BHF-Bank	*
§Fujitsu	50	1984	—	5	100	Deutsche Bank	5.06
SWISS FRANCS							
‡Lonrho	40	1989	n.a.	5	100	Bah. Keyser Ullmann en Suisse	5.0
‡Pfandbriefstelle Landes-Hypothbk.	60	1990	n.a.	4	100	Crédit Suisse	4.0
‡**§Rhythm Watch	40	1984	—	3¾	100	Bank Julius Baer	3.79
‡**§Best Denki	20	1985	—	3½	100	Crédit Suisse	3.5
‡**§Aoki Construction	30	1984	—	3¼	100	Swiss Volksbank	3.25
‡**§Okumura	50	1984	—	3½	100	UBS	3.5
FRENCH FRANCS							
‡Solvay et Cie	125	1987	7	9¾	100½	Banque de l'Union Européenne	9.66
LUXEMBOURG FRANCS							
‡City of Oslo	500	1989	6½	8	99½	Kredietbank Lux.	8.07
CANADIAN DOLLARS							
EDC	50	1984	5	10	*	Wood Gundy, Orion	*
Hudson's Bay Co.	50	1989	8.1	10½	*	Morgan Stanley & others	*
‡Prov. of Quebec	50	1986	7	10¼	100	BNP, Caisse des Depots et Consignations	10.25
YEN							
‡Austria	18bn	1989	9	7.2	99.7	Daiwa	7.38
‡Denmark	15bn	1989	9	7.2	99½	Yamaichi	7.41
UNITS OF ACCOUNT							
‡SOFTE (g'teed STET)	40	1989	8	8¼	99½	Kredietbank NV	8.33

* Not yet priced. ‡ Final terms. ** Placement. † Floating rate note. ¶ Minimum. § Convertible. †† Registered with U.S. Securities and Exchange Commission. ¶ Purchase fund.
Note: Yields are calculated on AIBD basis.

INTERNATIONAL LOANS

BY MARY CAMPBELL

An impressive digest from the BIS

THANKS to the Bank for International Settlements (BIS), it is now at last possible to make sensible estimates of individual country's debts without several years' study of statistical niceties first.

On Friday, the BIS published a document called "Manual on Statistics Compiled by International Organisations on Countries' External Indebtedness." As may be guessed from the title it is not the sort of tome which every loan syndication officer needs to carry round the world in his pocket.

But from now on no bank involved in international lending, however small its research department, can have any excuse for failing to do its homework on any national debt position.

The manual could also be useful to companies involved in providing suppliers' credits—companies which have tended to be the main losers so far in the critical cases of default like Turkey which have already come out into the open.

Finally, it is likely to consolidate the position even of experts in the field. One commentator on country debt said last week that it would fill in a number of gaps in his understanding of the statistics.

Arguably it is the most important contribution to international credit assessment since the BIS started to break down banks' cross-frontier lending by maturity in December 1976. For while a great deal of data is now published on countries' foreign debts, it comes from so many different sources at so many different times of year that it has been very difficult to use.

The new study, which runs to 110 pages, does three things. First it lists and describes all the various international sources of information both on cross-frontier flows of funds and also on the outstanding stock of countries' external debt. It tells readers what information is available from where, what the approximate publication dates are, and how out of date it is when published.

Second, it explains the scope and limitations of the information. Third, it gives indications of how all this information can be roughly put together to compile an estimate of overall indebtedness.

It falls far short of actual aggregation of the figures for individual countries. But the publication is part of the general thrust to improve the quality of data available on country debt.

An actual aggregation of figures might be the next stage. The BIS notes that "the international organisations concerned are now examining the extent to which these data could be aggregated in a form suitable for publication, using the more detailed information available for their own purposes but which is not publicly available." But such a development would not happen overnight, even if the necessary agreements for it were to be secured.

The World Bank, the Organisation for Economic Co-operation and Development (OECD) and the International Monetary Fund have all helped to prepare the new publication.

Imposing controls on banks' international lending has hitherto been considered virtually impossible. The authorities have therefore concentrated on helping lenders to help themselves by improving the information flows.

U.S. BONDS

BY STEWART FLEMING

Facing up to indices

THE NEW YORK bond markets are facing some difficult tests over the next few days as investors try to assess the implications of the confrontation in the trucking industry, the uncertainties posed by Congress's failure so far to raise the Federal debt limit, and the publication later this week of the Producer Price Index for March which is widely expected to show that inflationary pressures continue to run at a double digit annual rate.

Thoroughout most of last week the prices of long-term bonds were firm and in spite of a decline on Friday prices in both the corporate and Treasury sectors ended the week a shade higher with gains of around one quarter of a point in longer dated government issues.

Interest rates in the short term money markets also declined slightly, although the Federal Reserve Board's target of about 10 per cent for Federal funds appeared unchanged.

The performance of the markets was widely ascribed to the continued failure of Congress to approve an increase in the U.S. Government's debt ceiling from $798bn to $830bn and the consequent shortage of stock.

The lack of action in Congress on this issue threatens to pose a serious problem for the authorities and has already disrupted the financial markets. Unless the House of Representatives acts today to approve an increase, the Administration will, according to official forecasts, be unable to meet its obligations.

These include payment of some $7bn of social security cheques. Last week the Treasury stopped selling savings bonds and in efforts to increase the available cash, called on banks to pay in any tax receipts they were holding. In order to stay within its debts ceiling, the Treasury has also postponed an estimated $10bn of securities.

On the assumption that Congress approves the increase in the debt ceiling early this week, the markets are likely to be faced with the task of absorbing a flood of new Treasury sales and it was this prospect which sparked the decline in prices on Friday.

FT INTERNATIONAL BOND SERVICE

U.S. DOLLAR STRAIGHTS	Issued	Bid	Offer	Change on day	Change on week	Yield
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

DEUTSCHE MARK STRAIGHTS	Issued	Bid	Offer	Change on day	Change on week	Yield
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

SWISS FRANC STRAIGHTS	Issued	Bid	Offer	Change on day	Change on week	Yield
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

YEN STRAIGHTS	Issued	Bid	Offer	Change on day	Change on week	Yield
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

OTHER STRAIGHTS	Issued	Bid	Offer	Change on day	Change on week	Yield
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

FLOATING RATE NOTES	Spread	Bid	Offer	C.dte	C.cpn	C.yld
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

CONVERTIBLE BONDS	Cnv. date	Cnv. price	Bid	Offer	Chg. day	Prem
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

BONTRADE INDEX AND YIELD

	Medium term		Long term	
Mar. 30 ...	95.22	8.65	89.16	9.35
Mar. 23 ...	95.17	8.65	88.99	9.37
High '79...	95.75	(1/2)	89.99	(30/1)
Low '79 ...	94.40	(11/1)	88.67	(28/2)

EUROBOND TURNOVER

(nominal value in $m)

U.S. $ bonds	Cedel	Euroclear
Last week	464.5	1,168.3
Previous week ...	612.7	1,440.7
Other bonds		
Last week	606.0	403.0
Previous week ...	368.9	464.4

* No information available—previous day's price.

† Only one market maker supplied a price.

STRAIGHT BONDS: The yield is the yield to redemption of the mid-price; the amount issued is in millions of currency units except for Yen bonds where it is in billions. Change on week = Change over price a week earlier.

FLOATING RATE NOTES: Denominated in dollars unless otherwise indicated. M = Minimum coupon. C.dte = Date next coupon becomes effective. Spread = Margin above six-month offered rate for U.S. dollars. C.cpn = The current coupon. C.yld = The current yield.

CONVERTIBLE BONDS: Denominated in dollars unless otherwise indicated. Chg. day = Change on day. Cnv. date = First date for conversion into shares. Cnv. price = Nominal amount of bond per share expressed in currency of share at conversion rate fixed at issue. Prem = Percentage premium of the current effective price of acquiring shares via the bond over the most recent price of the shares.

The list shows the 200 latest international bonds for which an adequate secondary market exists. The prices over the past week were supplied by: Bondtrade; Kredietbank NV; Credit Commercial de France; Credit Lyonnais; E. F. Hutton Services SARL; Commerzbank AG; Deutsche Bank AG; Westdeutsche Landesbank Girozentrale; Banque Internationale Luxembourg; Kredietbank Luxembourg; Algemene Bank Nederland NV; Pierson, Heldring and Pierson; Credit Suisse/Swiss Credit Bank; Union Bank of Switzerland; Akroyd and Smithers; Bankers Trust International; Banque Francaise de Credit International; Citicorp International Bank; Daiwa Europe NV; Deltec Trading Company; Dillon Read Overseas Corporation; EBC; First Chicago; Goldman Sachs International Corporation; Hambros Bank; IBJ International; Kidder Peabody International; Merrill Lynch; Morgan Stanley International; Nesbitt Thomson; Salomon Brothers International; Samuel Montagu and Co.; Scandinavian Bank; Strauss Turnbull and Co.; Sumitomo Finance International; S. G. Warburg and Co.; Wood Gundy.

Closing prices on March 30

INSURANCE

Questions begged by compulsory liability

BY OUR INSURANCE CORRESPONDENT

WE ARE now in the eighth year of compulsory employers' liability insurance and so smoothly have the compulsory laws been applied by the insurance market that the only visible evidence of change has been the displays on office and factory noticeboards of current statutory certificates of insurance.

It is trite to say that the employer must have cover to ensure employees receive compensation for any injury or illness caused in the course of their work as the result of the employers' negligence. This provokes the questions: "Who is an employee?" and "which employees have to be protected by law?"

The 1969 Act defines an employee as "an individual who has entered into or works under a contract of service or apprenticeship with an employer whether by way of manual labour, clerical work or otherwise, whether such contract is expressed or implied, oral or in writing." It then goes on to exempt certain employees and certain employers.

Vital words

The vital words are "under a contract of service or apprenticeship," but almost all insurers provide cover in respect of people outside the statutory definition: for example, people hired to or borrowed by the policyholder while under a contract with some other employer, or perhaps self-employed people doing work normally performed under a contract of service or apprenticeship with the policyholder.

The number of people who might be called "quasi-employees" and whose rights to compensation for work accidents may be insured for convenience under employers' liability policies, is increasing.

Last Friday a Financial Times report described how GEC at Manchester is running, in conjunction with the Manpower Services Commission, fortnightly employment induction courses, each for up to a dozen young unemployed people. While much of the time is taken up with classroom exercises, lectures and visits round the factory, on several days these young people are allocated positive tasks under supervision.

The Manpower Services Commission is concerned with two kinds of scheme for young unemployed.

In the first, the Youth Opportunities Programme, is to provide some youngsters with a practical introduction to working life. The youngster does not legally become an employee of the undertaking involved.

In the second, the Special Temporary Employment Programme which provides temporary jobs in areas of unemployment, the worker becomes a legal employee.

An undertaking

Insurers have now given an undertaking that any young person involved in either scheme wil be treated as an employee, not just for the purposes of employers' liability insurance but for public liability insurance as well. The employer participating in such an arangement does not have to tell insurers in advance, though he does have to include the temporary employees' wages in whatever declaration insurers require.

During their final school year some pupils undertake a few weeks' unpaid work to find out whether their chosen employment is suitable. Usually local authorities are responsible for this arrangement. Insurers are prepared to treat these pupils as employees, for the purposes of both employers' and public liability insurance, but only if the policy holder concerned informs insurers in advance and, in due course, includes in his wage return an appropriate notional amount of earnings for each pupil.

APPOINTMENTS

General manager for National Benzole

Mr. John M. Sperring has been made director and general manager of NATIONAL BENZOLE COMPANY from today. He succeeds Mr. D. Chadwick who headed the company for six years until retiring. Mr. Sperring joined National Benzole, a BP company, in 1957.

★

Mr. P. C. Williams has been appointed chairman and continues as group managing director of G. E. WALLIS AND SONS. Mr. R. C. Stevens, is divisional managing director of the western division based at Newport, Gwent. Mr. A. H. Baird has been appointed a director, and Mr. A. R. Deacon a director of County Bank, has joined the Board as a non-executive director.

★

Mr. Bernard G. Lewis, chief executive of Kumpulan Guthrie SDN BHD and Mr. John A. Logan, president of Guthrie North America Inc and of Ajax Magnethermic Corporation, have been appointed directors of the GUTHRIE CORPORATION.

★

Mr. Robert D. Wade has become group managing director of LEEDS AND DISTRICT DYERS AND FINISHERS.

★

Mr. Adrian Rapazzini has joined P. S. REFSON AND CO to establish and manage the bank's corporate finance department. He was previously a partner of Stoy, Hayward and Co. specialising in financial investigations.

★

Mr. A. C. Barker has been appointed a director of the BANKERS' INVESTMENT TRUST from April 2.

★

Mr. R. B. Annesley and Mr. C. J. Wakefield have been appointed executive directors of GREENGARDEN INVESTMENTS. They have resigned from the Board of ENGLISH PROPERTY CORPORATION and from executive duties within that group. Mr. R. M. Spiro is chairman of Greengarden Investments and Mr. D. A. Llewellyn has been appointed managing director of that concern. Mr. Llewellyn is a former chief executive of EPC.

★

Mr. Noel Blows has been appointed an associate director of HARLOW MEYER AND CO., foreign exchange brokers, a subsidiary of Mills and Allen International.

★

Mr. A. E. Hepper has been appointed a director of SHEEPBRIDGE ENGINEERING. He is chairman of Henry Sykes and is also a director of Cape Industries.

★

Mr. Richard Harbud has been appointed a director of HAYES MILL with responsibility for controlling internal sales. Mr. Robert Stimpson has become managing director of MATHERSON-SELIG. Both companies are members of the Harrison Group.

★

Mr. Peter C. Palmieri has been elected executive vice-president and manager of IRVING TRUST COMPANY's international banking group, New York. He assumes the duties of Mr. Ernst Schneider, who has returned to Switzerland to become a general manager of Credit Suisse in Zurich. Mr. David M. Mace, has been elected a senior vice-president and assumes Mr. Palmieri's duties as division manager.

Public Works Loan Board rates

Effective from March 24

Years	Quota loans repaid by EIP†	A‡	at maturity§	Non-quota loans A* repaid by EIP†	A‡	at maturity§
Up to 5	11⅝	11⅝	11¾	12⅜	12⅜	12⅝
Over 5, up to 10	11⅞	12	12⅛	12⅜	12⅜	13
Over 10, up to 15	12⅜	12¼	12¾	13	13	13¼
Over 15, up to 25	12⅝	12¾	12⅞	13⅛	13¼	13⅜
Over 25	12¾	12⅝	12⅞	13¼	13⅜	13⅜

* Non-quota loans B are 1 per cent higher in each case than non-quota loans A. † Equal instalments of principal. ‡ Repayment by half-yearly annuity (fixed equal half-yearly payments to include principal and interest). § With half-yearly payments of interest only.

TEL AVIV

Company	Prices April 1 1979	Change on the week
Banking, Insurance and Finance		
Bank Leumi le Israel	332	+ 4.0
IDB Bankholding	403	+ 2.0
Bank Hapoalim Br.	572	− 6.0
Union Bk. of Israel Br.	370	− 9.0
United Mizrahi Bank	218	+ 4.0
Hassneh Insurance Br.	382	− 8.0
General Mort. Bank Br.	365	− 4.0
"Tefahot" Isrl. Mt. Bk.	350	+ 6.0
Land Development		
Africa Israel Inv. I£10	940	− 5.0
Israel Land Devpt. Br.	221	+ 1.0
Property and Building	316	− 4.0
Public Utility		
Israel Electric Cpn.	287	− 9.0
Investment Companies		
Bank Leumi Invest.	341	− 10.0
"Clal" Israel Invest.	457	− 26.0
Discount Invest.	290	− 1.0
Commercial and Industrial		
Alliance Tire & Rubber	1,415	+ 15.0
Elco Br.	232	+ 3.0
Argaman Textile Br.	302	− 18.0
"Ata" Textile "B"	195	− 4.5
Amer. Israeli Ppr. Mills	749	− 12.0
Assis	390	+ 10.0
Elite	311	− 4.0
Teva Reg.	378	+ 3.0
Fuel and Oil		
Delek	201.5	+ 8.5

Source: Bank Leumi Israel BM, Tel Aviv.

WORLD STOCK MARKETS

Indices

EUROPE

WALL STREET

NEW YORK

CANADA

FINANCIAL TIMES SURVEY

Monday April 2 1979

West Berlin

Although it is Germany's largest industrial city, West Berlin remains viable only with the considerable financial support it receives from the Federal Republic. But its problems have often been vastly exaggerated and the city has managed to adapt well to living behind the border of Communist East Germany.

Battling against the odds

By Jonathan Carr

WEST BERLIN is alive and well—and remains one of the democratic world's most rewarding cities although it lies more than 100 miles behind the border of Communist East Germany.

Some used to think that West Berlin would be swallowed up by the Communist world, if not through direct military action then by other external pressures which would make life there impossible. When this proved to be incorrect it became fashionable to suggest that the city, drained of vitality by its internal problems and its unique political position, would simply fade away. It must be stressed therefore that reports of West Berlin's impending demise have been vastly exaggerated.

Of course, West Berlin has big problems—many but by no means all matched in other major European cities. These problems were for a long time largely ignored by non-Berliners because of the city's international political importance. Berlin was the "outpost of freedom," the city of the air-lift, of the Wall—the place where the Cold War was most visible.

It is a tribute to the success of the Four-power Berlin Agreement, and of the subsequent accords between East and West Germany, that this fascinating but unsettling political role is less often talked about now. As the excitement of the initial thrust of the "Ostpolitik" at the start of the 1970s began to dwindle, West Berlin became a more normal city and problems which had long existed, swam into public view.

True, West Berlin remains the largest industrial city of Germany (or, as one commentator with an interesting perspective put it, the most significant industrial centre between Paris and Moscow). But it is not viable without big financial support from the Federal Republic. Raw materials must be brought in from the West at great cost and the city has to provide its own power supplies without the backing of a larger grid at times of peak demand.

Then, West Berlin has no real hinterland and no commuters from the countryside. Those who leave the city go right away and are usually lost to Berlin for good. The population, which has been declining, now stands at about 2m and is likely to drop further. This is partly because for years more people have been leaving than have been moving in—although a near balance now seems to have been gained. But it is also because the death rate markedly exceeds the birth rate, not a problem in West Berlin alone but particularly acute there.

Berlin has had its scandals too. Some mirrored those occurring in West Germany—for example in the building industry, a boom sector where some over-reached themselves and went bust when the economic downturn came. Others were the familiar signs of a political leadership long—some said too long—in office.

But the democratic checks and balances have operated well enough. The Social Democrats (SPD) who have always held Government office in West Berlin, had to go into coalition with the Liberal Free Democrats (FDP) in 1975. The SPD then stabilised its position under a new and effective governing mayor, Herr Dietrich Stobbe, and the SPD-FDP alliance was confirmed in elections last month, despite a strong opposition challenge.

Finally—neither a problem nor a scandal but a mystery: even well-informed West Germans tend to be stuck for an answer when asked to define West Berlin's status. The city is, after all, a land (state) of the federation according to German law—but supreme authority remains in the hands of the four wartime Allied powers.

The city is incorporated in the economic and legal system of the Federal Republic and close to 30,000 federal employees work there. But, as the four-power agreement points out, West Berlin is not a constituent part of the Federal Republic and is not governed by it (although ties between the two can be maintained and developed). Little wonder that American Presidents have been known to make comments indicating that they will defend West Berlin to their last breath, but that they are not wholly clear precisely what sort of entity they are supporting.

Much of this may seem discouraging—or at the least disorientating. The modern German writer Hans Magnus Enzensberger caught the mood well enough when writing about the German states: "We belong," he said, "to two parts of a whole that does not exist. Two parts, each of which denies being a part, and each presents itself in the name of the whole. . . . . This condition is regarded as at once temporary and definitive—the provisional is inviolable."

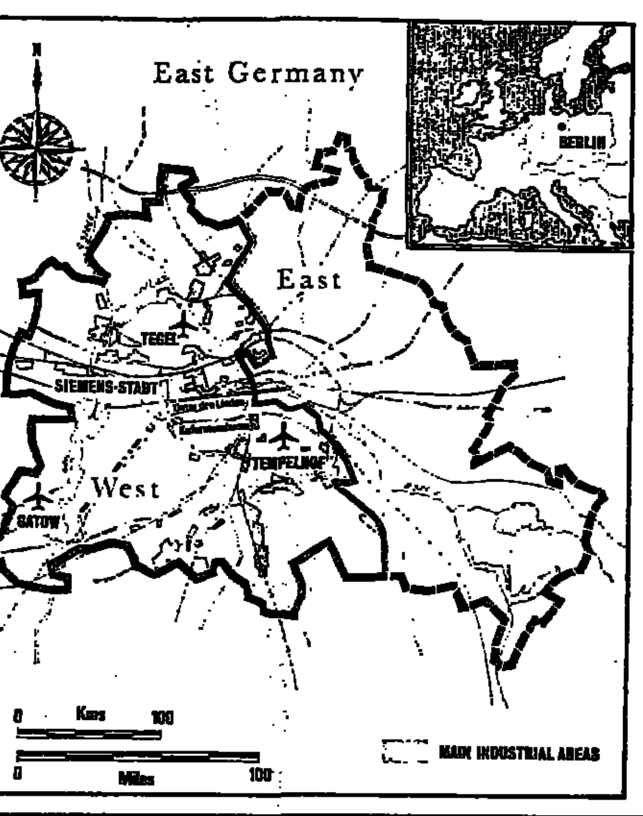
How then can relative optimism about the future be justified? Some reasons are political (and described in more detail elsewhere in this survey). The two German states are gradually improving contacts and relations between them. This process has benefited Berlin already and surely will continue to do so.

But it is also worth standing back and taking a look at the historical perspective. Even the city's division is not as modern a phenomenon as many might imagine. Berlin was born from two trading towns on either side of the River Spree which viewed each other with distrust even after their leaders had agreed on a common town hall at the start of the 14th century. Each was under geographical and economic pressure to cooperate with the other—and with time this is what happened.

United Berlin had many crises. Today the population decline is a matter for concern. But it is worth recalling the shocking setback of the 30 years war in the 17th century when the town, by then an important trading centre, was made by warring parties to pay tribute to each but was finally sacked. The population of about 10,000 dropped by almost half, yet decades later Berlin was more important than before and by the time it became the capital of the German empire in 1871 nearly 1m people lived there.

The First World War, hyper-inflation, strikes and street violence gave way to the "Golden Twenties" when Berlin confirmed its industrial and cultural pre-eminence. Then came the era of Nazi power, another war, destruction and a 1.5m drop in population to about 2.8m. The recital of such figures hardly helps comprehension of the disaster. It is much more striking to stand nearly 400 feet up on Berlin's "Trummerberg" mountain and recall that it was built from war debris.

Berlin — East and West



Vitality

Immense vitality, the ability to make a comeback against all odds, is the common thread which runs through the city's history. Despite the departure of many former Berliners for the West and the arrival not only of other Germans but many foreigners too, there remains a Berlin "flair" — recognisable even to those who first learned of the city's character from books written decades earlier.

Part of that quickness of mind and sardonic sense of humour, which many West Germans find uncomfortable about Berliners, may even be of French origin. Thousands of Huguenots who fled their homes after the revocation of the Edict of Nantes in 1685, settled in Berlin.

Can that be why Berlin cabarets, political and otherwise, have a flavour which often evades those in Hamburg and Munich (unless, of course, they are run by transplanted Berliners?) Might it not also help explain why Berliners can give a peculiarly clear-sighted, logical critique of the West German way of life even as they benefit from its successes—a richly ironic situation which Berliners will wryly acknowledge.

Despite several rival claims, Berlin is still the only German city with the "feel" of a capital about it. This is not simply because of the reminders of the past — the Reichstag (where parliamentary groups still meet from time to time), the Brandenburg Gate, Charlottenburg Palace and so on. Nor is it a question just of injections of outside money. It has much to do with preservation of tradition —even though so many factors have told against this.

There could be many examples, culturally and otherwise. One will suffice: a concert in February given by the peerless Berlin Philharmonic Orchestra, its members, playing as though their lives depended on it, in their concert hall hard by the wall dividing the Eastern and Western sectors.

The programme noted that exactly 50 years before, the same orchestra had been playing under Furtwaengler with Kreisler as soloist. It is hard to believe that those who performed then would have had anything but praise for their successors. They would surely have found it gratifyingly like the old days.

Economy operates efficiently

WEST BERLINERS take for granted the highly efficient way their city of some 2m is supplied round the clock from West Germany and sends back most of its processed goods. This past winter, though, it struck home that not once did West Berlin experience shortages of any kind or cuts in electric power during the severest storms in decades that wrought havoc all around the city.

One little-noticed event illustrated the enormous improvements in West Berlin's position since the Four Power Agreement 30 years ago. Although East Germany was struggling with serious shortages of fuel and railway transport, it diverted extra East German Reichsbahn trains to transport oil from Hamburg to West Berlin.

The annual transport across East Germany of DM 44bn in goods between West Berlin and West Germany takes place with fewer delays than experienced by most large cities. West Berlin's geographic position is to be enhanced in coming years with the construction of an Autobahn linking the city with Hamburg, while freight carried over the canals linking West Berlin and West Germany will be speeded up by the reopening of the Teltow Canal in West Berlin, closed after the building of the Berlin Wall. A quarter of all freight carried between the city and West Germany already is shipped by barge.

West Berlin's gross domestic product last year rose 3 per cent in real terms compared with 3.4 per cent in West Germany, an improvement that is expected to continue this year with an increase of 3.5 per cent in GDP for the city against 4 per cent growth in West Germany.

For several years Berlin investments lagged behind those in the Federal Republic but last year capital goods investment was up 10 per cent and is expected to rise by about 8 per cent this year, or about the same as in West Germany. Philip Morris for example is investing DM 40m to expand its Berlin factory. Bosch is investing DM 35m, Daimler Benz DM 100m and Siemens DM 12m after putting DM 1bn into its factories in the city over the past seven years.

West Berlin's economic life is intertwined with West Germany's, including the vital assistance it receives from Bonn. The Federal Government this year is paying 51 per cent of the city's budget or DM 8.4bn. West Berlin gets 58 per cent of the economic assistance West Germany grants to regions requiring aid, which is an even higher proportion than a decade ago.

Contrary to some fears when the Four Power Treaty was signed, West Germany has steadily increased its financial support for Germany's largest city. Only last month Bonn agreed to double its yearly subsidy to DM 83m for lowering the fares of passengers using British Airways, PanAm and Air France flights between West German cities and West Berlin. Federally-owned companies placed DM 351m in orders to West Berlin companies last year and Chancellor Helmut Schmidt and the Economics Ministry have leaned on major West German companies to buy from West Berlin companies, all things being equal.

Lucrative

The largest single subsidy to West Berlin, amounting to DM 1.3bn in 1977, is the reduction in the 12 per cent Value Added Tax from between 4.5 per cent to 10 per cent of the price of a product being sent to West Germany. The reduction depends on the value added to the product in Berlin and, before a 1976 ruling that at least 10 per cent of the product's value must be made in Berlin, there were some glaring abuses.

For example, West German coffee roasters found themselves losing their traditional business to West Berlin, and meat slaughtering burgeoned out of all proportion in Berlin where it took little more than a blow to a carcass to qualify for a healthy reduction in VAT. Sticking a label on a botte of West German liquor and sewing a button on a finished jacket in West Berlin boosted profits considerably. Those indulgent days are over but it is still lucrative enough for many West German and foreign companies to manufacture in West Berlin.

Second most important among the preferences granted to West Berlin's industry are the income and corporate tax reductions amounting to DM 395m. Corporate taxes are 22.5 per cent lower than in West Germany and income taxes are 30 per cent less. Small wonder that some of the most expensive cars in Germany are driven from Grunewald mansions to the fashionable restaurants off the Kurfürstendamm. The average Berliner has the highest level of consumption of durable consumer goods among West Germans and, in fact, enjoys 8 per cent more income than in West Germany if he earns up to DM 30,000 a year.

Berlin's investment subsidy is nearly as important and came to DM 384m in 1977. The city will buy a company a factory site for which it then pays 4.5 per cent of the purchase price and gets a hereditary lease. Companies are also reimbursed 12.5 per cent of building costs and the city gives a 25 per cent rebate for investments in machinery and equipment. Low-interest European Recovery Program loans at 3.5 per cent for up to 14 years are made available for investments in buildings and machinery along with other advantageous city credits which amount to DM 126m a year.

A few weeks ago, the West German Bundestag voted to further improve assistance to Berlin by including engineering consultants among the companies allowed VAT preferences. In addition, investment subsidies are raised for the purchase of buildings used for research and development and for data-processing equipment used in providing services for West German companies. The companies profiting the most in Berlin are capital intensive ones that have a high volume of investments, are profitable and sell most of their products to West Germany or export them. A company such as BMW has its entire motorcycle production in Berline and is now investing DM 180m to build a new factory that will produce car parts.

Foreign-owned companies such as Gillette, IBM and ITT have major plants in West Berlin and both BAT and Philip Morris supply the West German and European markets from the city. Schering, the Berlin chemicals and pharmaceuticals company with 10,000 employees, has built up a DM 2.2bn international business from its base in the city but companies of this size are unusual there. The average Berlin company is small to medium-sized with 40 per cent employing up to nine people and another 40 per cent employing from 10 to 100.

The loss of industrial jobs is a problem in West Berlin just as in West Germany and several large companies, especially in industries with structural problems such as mechanical engineering, have closed down. The number of workers in industry fell by another 5,000 last year but steadied late in the year at 172,000, a level its is expected can be held this year but which is down from 265,000 jobs in 1972.

The city extols the advantages to companies of being close to West Berlin's scores of research and development institutes, including the Hahn-Meitner Institute for Nuclear Research, the Heinrich Hertz Institute, four institutes of the Max Planck Society, the Federal Agency for Materials Testing, the Institute for Production Technology and Automation as well as the Technical University. West Berlin companies spent DM 540m on research and development in 1977 with the largest amount, DM 327m spent by the electrical industry and DM 169m by the chemicals and pharmaceuticals sector.

Expansion

One area in which additional jobs are being created is the service industry. The number of service employees rose last year by 1.2 per cent to 148,000 or, 18 per cent of all employees. They have profited from the city's growing tourism, conventions and trade fairs which have also made necessary an expansion of hotel room capacity by 3,000 new rooms up to mid-1985. The city is now in the odd situation of having to find future hotel employees in Sicily because they are lacking in Berlin along with many other skilled workers.

West Berlin has made considerable efforts to attract West German workers to the city, whose population fell by 17,500 last year largely because of the excess of deaths over births. Estimates have the city declining in population to 1.7m by the turn of the century, by which time it may have started attracting people from more overcrowded regions. The number of foreigners in West Berlin is continuing to rise and will reach 210,000 this year, making one in every ten West Berliners a foreigner or a first generation German.

Leslie Colitt
Berlin correspondent

The wall becomes 'porous'

IT IS revealing and thought-provoking to revisit East Berlin after 18 years of absence. The first time (three days before the building of the wall in 1961) the contrast with the western sector was sharp enough. West Berlin was described as the "glittering shop window of the democratic world," and while the city has always been more than a window, the description, within its limits, was fair enough. East Berlin, on the other hand, had few shop windows to speak of, glittering or otherwise. The architecture appeared to be either bombastic "wedding cake" style, after the Soviet pattern, or dour blocks of dwellings, after nobody's style in particular. Colourless, lifeless—it was a pleasure to move on to the relative cheer of Warsaw.

Today those who know other East European capitals well are inclined to talk of East Berlin as the shop window of Comecon. There seems little reason to challenge this judgment. The city appears quite full of Poles, Russians and others viewing the products of the East German "Wirtschaftswunder" with that same uneasy admiration which Western European visitors accord the main cities of the Federal Republic. By comparison with the East Berlin of 18 years ago, the shops, the products, some of the main buildings in the centre mark a striking advance. Even the people seem to have changed—or is it just that they are better dressed It is not like West Berlin nor, perhaps, would one choose to live there oneself. But it is only fair to report the existence—for those not so far aware of it—of two shop windows in the former capital of the German Reich.

Where is the development leading? It is the obvious question, not to be answered definitely. So far as one can discover, by anyone. "The Germans are extraordinarily diligent; in the West, in the East," one German commentator noetd earlier this year. "Does that really link them together? I'm just not sure."

The point is that the Germans, through detente, have received the opportunity to forge closer links—and they have used them. They are doing so more than ever at a time when for many in the West the "Ostpolitik" of former Chancellor Willy Brandt has almost dropped out of sight. It is worth glancing back at what has been happening.

The key was the Four Power agreement (hte United States, the Soviet Union, Britain and France) on Berlin, of September 3, 1971. That did not mark the start of Ostpolitik—Bonn had already signed agreements with the Soviet Union and Poland in the previous year. But it was the four-power accord which laid the basis for future advance in three main ways.

First, the Soviet Union for first time in treaty form recognised the close ties between West Berlin and the Federal Republic and agreed that these should be developed. It is true that there have been repeated squabbles over this part of the text, with each side interpreting the word "ties" in the way best to suit itself.

Quarrel

It could well be that another quarrel will arise shortly over the participation fo West Berlin in direct elections to the European Parliament. But one only has to compare the level of these disputes with the dangerous situation which existed before 1971 to recognise the extent of the progress made.

Second, transit traffic by road, rail and water through East Germany to West Berlin was not only to be unimpeded but would receive preferential treatment. This, too, was a major benefit, bearing in mind the repeated harassment to which Berlin's land lifelines had been periodically subjected—and to which they could be subjected again without treaty regulation. Some may recall this larconic message: "Due to a technical defect on the railway the transport administration of the Soviet military administration in Germany was forced to halt passenger and goods traffic on the line Berlin-The date was June 23, 1948. It Helmsted in both directions...." was the Soviet action which led to the Berlin airlift.

Third, communications between West Berlin and East Germany, including East Berlin, were to be improved allowing West Berliners to visit friends and relatives on the other side of the Berlin Wall. The agreement, the result of hundreds of hours of negotiations between the Western Allies and the Russians, was followed by further detailed, difficult talks between the East and West Germans, who signed their own treaty regulating general relations in 1972.

A few figures will indicate the extent to which these agreements have made their impact—the extent to which the wall has become "porous" as it were. West Berliners are allowed to visit East Berlin and East Germany for up to 30 days a year. Last year West Berliners alone made more than 3.2m such visits—some just for part of the day, some for longer. At the same time almost the same number of West Germans visited East Germany (against 2.2m in 1973). The number of East Germans coming the other way is much lower—confined, at present, to those of pensionable age or those who wish to visit the west for "urgent family reasons." Nonetheless the total last year was 1.4m. Even the statistics for telephone calls show how the situation has changed. In 1970 there were still no direct calls from West Berlin to East Berlin and East Germany—in 1976 there were more than 7m.

Beyond this growing network of personal contacts, which clearly must have an impact on the ideas and judgments of *both sides*, official talks have been going on. The most notable outcome was last November when the two German states signed a series of long-term agreements to strengthen further West Berlin's ties with West Germany—while providing East Germany with more hard currency. (It has to be noted that the West Germans have paid large bills for many of the advantages gained over the years. The argument is that if the Berliners gain, which they obviously do, and the East German people benefit, which presumably they must be some degree, then it is a price worth paying. The East Germans are, after all, Germans.)

The main element in the new accords in construction of a new motorway between Hamburg and West Berlin across East Germany. This is important, incidentally, not only to the Germans, but also to Czechoslovakia and Hungary, which make big use of Hamburg port. Further, it was agreed that East Germany will reopen the Teltow Canal—thus shortening the barge trip from West Germany to West Berlin by two days. Talks are to go ahead on further improvements and meanwhile other official but non-governmental contacts are gathering pace. For example, a smiling Herr Eugen Loderer, head of the West German metalworkers union IG Metall, could recently be seen in East Germany, agreeing that he and his East German colleagues did not see eye to eye on everything, but that they found it useful to have contacts and develop them.

Responses

The word "reunification" has been deliberately avoided since it arouses so many emotional responses as to make further consideration of the question difficult. (It is worth recalling, however, that the premable of the Federal Republic's basic law [provisional constitution] says that "the entire German people are called upon to achieve in free self-determination the unity and freedom of Germany.") But if a key aim of Ostpolitik was to bring the two halves of Germany closer, to move towards a situation in which the Berlin wall became increasingly irrelevant, then it is fair to assess the policy as already a success—and, barring a serious rise in tension between the super-powers, likely to become still more so.

Leaving aside politics for a moment, it is worth recalling a song by Herr Wolf Biermann, the West German satirist who chose to live in East Germany but who was prevented from returning there after a concert tour in the West in 1976. Called "Deutsches Miserere" he sings of the people of Europe who, perhaps, are fortunate because Germany is divided into two hostile parts. But the wall will come down, he insists, and much will change on both sides. Politicians are not renowned for taking much notice of troubadours—even good ones. Perhaps in this case they should think again.

Jonathan Carr

Congress centre on the grand scale

WHEN THE International Congress Centre is opened in West Berlin today by President Walter Scheel of West Germany before an audience of 7,000, the sheer size of both the event and the building will strike many Germans as typical of the brash Berliners and their sprawling city.

The accompanying concert on the congress centre's grand stage by the Berlin Philharmonic Orchestra, under Herbert von Karajan, and the following day's concert by Karl Böhm and the Vienna Philharmonic, will demonstrate that no less attention has been paid to the acoustics of the building's enormous multi-purpose halls than to their commercial viability.

The opening of this DM 800m (£210.5m) futuristic structure is designed to help make West Berlin the first-ranking convention city in Germany.

The silver-sheathed building, which appears to glide along its site like some gigantic opened matchbox, exudes the energy that typifies this city at its best. Situated next to the sprawling Berlin Exhibition Grounds and linked to them by a three-storey flying bridge, the building also represents the city's even more ambitious goal to become one of the world's foremost convention centres.

Convention-goers will certainly appreciate the centre's siting, five minutes by bus or underground from the heart of West Berlin and less than 10 minutes from the airport by car.

Currently, the city ranks with Munich and Hamburg as one of the leading German convention cities, and is in 10th place internationally. The opening of the congress centre is expected to propel West Berlin into first place in Germany, and move the city into sixth or seventh place internationally.

Herr Peter W. Haupt, the building's general manager, says he hopes that by 1985 West Berlin will have risen to third place among the world's convention cities, behind London and Paris.

"There's far more competition between ourselves and convention managers in other German cities than we have with our colleagues in Paris and London," he explains. The reason is that international conventions and conferences wander over the globe, and when they choose to meet in Europe, only one country is considered each time. Most of the rivalry takes place between that country's cities to host the convention, and this also explains why the new Berlin centre is so large.

"This year we will have three events with 5,000 people at each of them," Herr Haupt says, and this will fully utilise capacity. Next year there will be five events of this size.

Depending on the type of convention or conference, the two main halls — separated by the enormous central stage — can seat more than 8,000 participants, with just over 5,000 in Hall 1 and 3,160 in Hall 2. Hall 1 can also be transformed for working sessions by rapid converting of every other row of seats into desks.

About 2,000 participants can take part in a conference in Hall 2 when seating galleries are lowered from the ceiling, turning the hall into a tiered auditorium. The platform can then be raised to create a ballroom holding 4,000, or a banqueting hall seating 3,200 diners.

A specially-designed Berlin conference chair, supposed to keep occupants' spines from collapsing has been installed in both halls with everything incorporated except for side-rests to permit a conference snooze.

In addition to the two main halls, the congress centre has a third auditorium with 870 seats, and seven other rooms seating from 126 to 288 people. Another 70 rooms of various sizes provide more intimate surroundings for working groups.

Among the larger conventions and meetings to be held at the centre this year will be the European Brewers' Convention next month: the Volkswagen Company's shareholders' meeting, with 4,000 participants; a meeting of Daimler-Benz car dealers, a shareholders' meeting of West Germany's largest company, Veba; a jubilee celebration by the Siemens Company; a world conference by the Hoechst Company; and the German Social Democratic Party's national convention.

A main event next year will be a world convention of the International Bar Association.

From now until 1981, the congress centre is booked solid, with 100 conferences and conventions. Another 270 events are now being worked on, up to 1985, and the centre is negotiating *to hold conventions of* 6-7,000 participants in 1987 and 1989.

Benefits

However, Herr Haupt says that convention centres probably can never be made profitable, and the new congress centre is receiving subsidies from the city of about DM25m (£6.5m) annually, in line with other convention centres.

Financial benefits that do accrue will go to the economy of West Berlin, he says, pointing out that the average convention-goer spends DM 250 a day or four times the amount of the average tourist. Participants at the centre's conferences and conventions in the first year of operation are expected to spend about DM 120m in the city's hotels, restaurants and shops.

The organisers of West Berlin's fairs and conventions believe that the city's location in the heart of East Germany can be turned into an advantage. They point out that East European governments, which are forced to save hard currency, may prefer to have their citizens take part in a conference in West Berlin because they can stay overnight in East Berlin hotels for non-convertible currency, rather than pay for costly trips to the West.

The idea that West Berlin may not be acceptable to East European governments for political reasons is discounted in the city. East European experts are expected at the European Brewers' Convention and the international meeting on East European automobile production because they profit from such contracts.

Similarly, East European participation is heaviest at those West Berlin exhibitions and fairs where East European countries see a direct commercial gain.

All the Comecon countries are regular exhibitors at the International Tourism Exchange, held in the city in March, and which this year had 700 exhibitors from 80 countries and regions. It is regarded as a highly-successful event because of the importance of the West German holiday-maker to international tourism.

The International Congress Centre and the adjoining Berlin Exhibition Grounds are seen by their parent organisation, the Berlin Company for Exhibitions, Fairs and Congress (AMK) as mutually complementary, because trade and speciality fairs are increasingly being held together with conventions.

The Tourism Exchange, for example, takes place with a congress each year, and the International Green Week and the International Radio and TV Exhibition attract several parallel congresses and seminars.

The Berlin Exhibition Grounds, with 24 large halls in a park-like setting, make West Berlin the fifth-ranking exhibition city in West Germany. Last year 1.6m people, including 120,000 trade visitors from Berlin and outside, attended exhibitions in West Berlin.

In addition to the Green Week and the Tourism Exchange held earlier this year, the major coming event is the Radio and TV Exhibition in August, which attracted 626,000 visitors when it was last held in 1977.

The Overseas Import Fair in September is another successful event which provides a trade and contact forum on products from developing countries. The German Industries Exhibition, held in Berlin every other year, is to have greater participation than ever from the West German car industry next year.

Leslie Colitt

The new centre: typical of the brash Berliners

Restoring the city

ONLY A few streets from the pulsating Kurfürstendamm are quiet tree-lined residential neighbourhoods with small family-owned shops in 1890s Wilhelminian buildings that would long since have been raised to make way for office buildings in most West German cities. West Berlin is guilty of its share of urban mis-planning, but thus far it has been spared the unbroken façades of glass and steel in a mid-city drained of life after darkness.

The city's blend of apartments, offices and shops is less a virtue than a product of necessity as West Berlin has no suburban hinterland luring its inner-city residents with pre-fab housing.

Despite the building of over half a million new flats since the war and the apparent balance in housing of 1.1m flats to 1.9m inhabitants, newly arrived West Germans say the actual housing shortage is worse than in West German cities. For one thing the city still has over 600,000 apartments heated by coal-burning ovens and 250,000 flats without either bath or toilet or both. The worst housing is occupied by 180,000 foreign workers and their families, mainly from Turkey, while West Berliners and West Germans compete for the better flats.

The city's goal is to modernise 200,000 substandard dwellings in the next 25 years at a cost of over DM 9.6bn, of which DM 7bn will be in public funds mainly from West Germany. This marks the most ambitious project in Germany to restore the inner districts of a major city and prevent their decay into slums.

An international building exhibition is to be held in West Berlin in 1984 to demonstrate at first hand how city cores can be revitalised. One can view the results of the 1931 building exhibit on "housing estates in green spaces" by visiting the Horseshoe, Siemens and Uncle Tom's Cabin housing estates which are still regarded as highly livable in by their occupants.

Renovated

Some 60,000 apartments are to be renovated and modernised as part of the 1984 exhibition, while the old town in Spandau district is to be fully restored with four city squares given back their lost urban quality. Nine thousand new flats are to be integrated into the inner city without sacrificing green surroundings. West Germany is providing DM 48m to reconstruct the former Applied Arts Museum with the help of Polish craftsmen; the Ephraim Palace is also to be rebuilt at a cost of DM 22m and is to house, among other things, the Jewish Museum of Berlin. Yet another restoration is that of the citadel in Spandau, to be completed at a cost of DM 72m with DM 27m coming from West Germany.

West Berlin's postwar cultural complex arcing toward East Berlin's restored Unter den Linden, has a DM 200m addition, the State library designed by the late Hans Scharoun. Scharoun was also the gifted architect of the nearby Philharmonic building whose striking in-the-round interior and acoustics make it one of the finest of modern concert halls. Across the street from the State library is the by now classic National Gallery by Ludwig Mies van der Rohe.

In West Berlin's eagerness to duplicate, in miniature, all that seems modern elsewhere, the city has built over 30 kilometres of inner city autobahn which is being expanded by another 19 km, with 20 km more planned if Berliners have not rebelled by then.

On the positive side West Berlin's underground, which is 97 km in length (East Berlin has another 26 km), is to be expanded to 140 km in a few years and 200 km is the goal. Public transport in West Berlin is supplemented by the East German-run urban elevated railway, the S-Bahn, which provides one of the more unusual tours along the West Berlin side of the Wall.

Amenities

Although Berlin already has more amenities than many other large cities, it is trying to improve their distribution. West Berlin's 360 km of streets with bicycle paths, mainly in the suburbs, are to be expanded to over 500 km including inner districts. The city is well endowed with green areas but the spread is unequal. The southeast district of the city is to get a wholly new park by 1985 when the West German garden show is to be held in Berlin.

Elsewhere, the city has created 20 recreation areas on top of 250 hectares of former garbage dumps containing 109m cubic metres of rubble and waste: DM 67m is being spent on completing this urban land reclamation by the mid-1980s.

Young adults in Berlin are showing increasing interest in a form of Berlin family life that flourished over the years but appeared in danger of being extinguished: the allotment garden. Here families spend their free hours tending fruit trees and flowers and drinking and eating with friends outside their tiny houses. Relief is offered from city pressures which are often only a few hundred yards outside the gates of the garden colonies. West Berlin still has 48,000 of these allotment gardens and, although many of them were eliminated in recent years by road construction, the new policy is to ensure their survival as a stabilising influence in a rootless era.

Ironically, Berliners feel hemmed in when they live in most other cities and the explanation is that Berlin has the largest forest area of any European city. Statistically, there are 36 square metres of woodland for every West Berliner and on warm summer days they lay full claim to them. More than half of West Berlin's 184 square miles consists of forest, lakes, gardens and parks and in mid-summer there are actually traffic jams involving thousands of boats of all sizes on the Wannsee and on Tegel lake.

West Berlin's statisticians work their limited territory rather intensively and have come up with the fact that all the water frontage in the city adds up to 300 km. In this day and age how many cities are able to spend DM 600,000 a year simply on preserving and planting reeds along their lakes and rivers?

L.C.

Provocative city liked by artists

A FOREIGN theatre director says living in Germany brings out a creative tension between himself and his surroundings because Germans are forever asking provocative questions. He would find Berlin tailor-made for him because it is certainly one of the most provocative cities there is.

Berlin is the youngest of the great European cities and yet it has seen so much it seems to know it all. Divided Berlin is a microcosm of divided Europe and yet the Berliner has had his fill of slogans and ideology.

Berliners in the West partake of the most democratic of societies while Berliners in the East live in the most dictated-to of proletarian dictatorships.

Berlin is where the Bauhaus, the German art and design movement, reached its zenith and where a generation later its successors are producing endless imitations. Berlin is where the German and European student revolt was sparked off by a visit to the city 12 years ago by the Shah of Iran.

The student revolt subsided into social democratic reforms for Germany but for the Shah of Iran it turned out to be the beginning of the end.

Berlin is also where the former mayor, Herr Willy Brandt, confronted the Communists before and after the Wall was built and where he came to the conclusion that butting one's head against the Wall was not going to open it up.

Berlin gave birth to detente in Europe in the early 1970s but it is there that detente also met with the greatest resistance on both sides of the Wall. It is a city where tens of thousands of Germans from East and West meet each day and mainly compare incomes and prices.

Herbert von Karajan conducts what many regard as the world's most sublime orchestra there—the Berlin Philharmonic—and the schools produce adults who usually do not appreciate good music. The city that once created operas, operettas and songs hummed by generations of Central Europeans now imports almost all its popular music from the U.S. and Britain.

Lure

Fifty years ago Berlin turned out an endless stream of quality films for European audiences. Now it is luring West German and foreign film makers with hard D-marks to come and make films in the city. And the lure may even work.

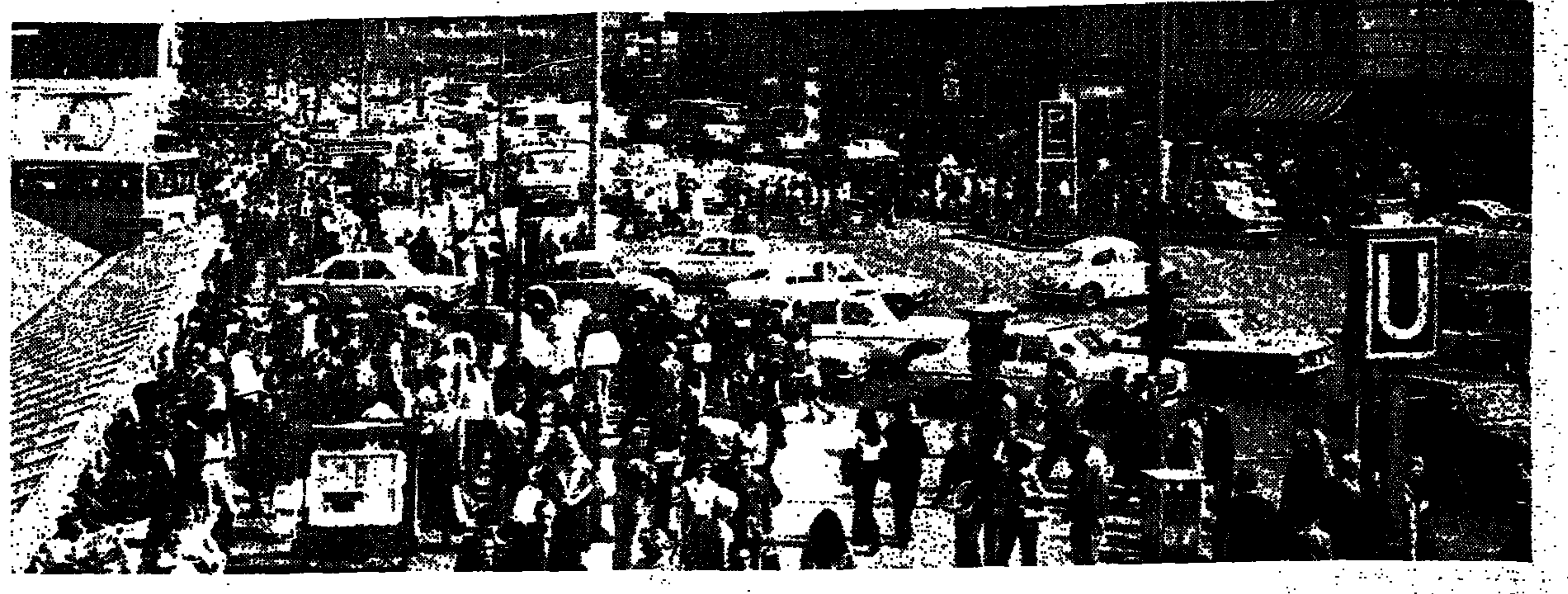
Berlin may never again have the artistic life it enjoyed between the two world wars, but it does have a growing number of German and foreign painters and sculptors who find the atmosphere conducive to their work. A lot of the credit for this should go to the Artists in Berlin Programme started by the Ford Foundation and taken over by the German Academic Exchange Service.

The programme has brought to Berlin such painters, sculptors, writers and musicians as Edward Kienholz, Peter Sedgley, George Rickey, Dorothy Iannone, Miklos Harasati, Rick Cluchey, George Tabori, Witold Wirpsza, and Isang Um Yun, many of whom have decided to stay.

Among the local painters and sculptors with a following are Kurt Muhlenhaupt, whose Berlin primitives are especially popular in West Germany and Bernhard Heiliger, who is mainly a representational painter.

Those who are knowledgeable about the local art scene say too many Berlin artists are more concerned with getting a share of the city's financial support for artists than they are in achievement on their own. The artists, in turn, criticise the city for engaging in too much cultural representation such as the Twenties Meeting the Seventies in London, the Paris-Berlin Show in Paris and Berlin Now in New York—all of them great successes—while not nurturing Berlin's arts enough.

So much in Berlin has an unreal, theatrical quality that theatre-going is sometimes a disappointment. The great student demonstrations of the 1960s and 1970s have died down but some of their theatrical flavour lingers on at the city's annual May Day demonstrations. Berlin, East and West, boasts no fewer than four competing May Day demonstrations, from the highly organised march-past in East Berlin with thousands of booming loudspeakers, to the clenched fists of the Communist League of West Germany in a working-class district.



Young Leftists at the West Berlin demonstration are dressed for the occasion in some of the finest proletarian tailoring seen off the stage of the Berliner Ensemble theatre in East Berlin. Their discipline is nearly as impressive as it was during the student revolt when young Berliners, chanting "Mao Tse-tung" and charging down the fashionable Kurfurstendamm would be stopped in their tracks when the traffic lights turned red.

The Schaubuhne am Halleschen Ufer, Berlin's most celebrated theatre, is the place to experience extraordinary acting and staging even of unremarkable plays such as the current Rudi, by Bernard von Brentano. It is being presented in an abandoned former luxury hotel which abuts the Berlin Wall— one of the theatre's temporary venues until its new premises are ready.

The Schaubuhne's current 5½-hour production of Dean Destruction and Detroit by Robert Wilson, is a treat for those with the endurance to sit it out in the queues and the luck to get tickets. The Schaubuhne will be getting a reconstructed DM 70m theatre of its own from the city on the Kurfurstendamm and with the level of public support it is getting, it is hoped that rigor mortis will not set in.

Walk-out

Berlin is the city of cultural festivals with theatre and music festivals in both east and western sectors and the annual West Berlin Film Festival. This February it was interrupted by a classic Cold War walk-out by the East Europeans over The Deer Hunter, a not very incisive American film about the Vietnam war.

A new festival is being held this year in June called Horizons, the First Festival of World Cultures. It is to be inaugurated by Herr Brandt in his capacity as President of the North-South Commission.

Dr. Ulrich Eckhardt, director of the Berlin festivals, says one aim is to help Third World countries strengthen their cultural identities. The idea is to get away from presenting, as he puts it, "African symphony orchestras that play Beethoven" and the first Horizons Festival is to stress Africa south of the Sahara including the cultures of the Caribbean and Latin America which were influenced by Black Africa.

Horizons may even succeed in bridging the gap between a festival and a large city with its musical programme devoted to African pop, beat and rock and African bands appearing at street events all over West Berlin.

Miriam Makeba, who sang at last year's Jazz Days, has been invited to sing along with ten female musicians and singers from Guinea and there will be drummers from Burundi, Yoruba dancers from Nigeria and Afro-soul from the Ivory Coast.

Seminars

African theatre ensembles such as the Ghana Drama Studio, the University Theatre of Tanzania and the Aafumi Theatre will perform and authors from Black Africa will discuss the role of writers in developing countries.

It is evident that no expense is being spared by federal or local government to make sure that West Berlin stays in the mainstream of culture and the arts. This is also the reason the city supports the Aspen Institute of Berlin which, in the few years since it arrived, has brought leading politicians, economists and social scientists to West Berlin for seminars on problems facing the Western, Communist and Third Worlds.

Incidentally, the former capital of former empire of Prussia, is planning to hold a spectacular exhibition in two years' time called "Prussia," along the lines of the Tendencies of the Twenties art exhibition which was a huge success in 1977.

The mere thought of Prussia causes Germans in other parts and many foreigners to wince, but the exhibition might turn out to be a highly provocative and perhaps eye-opening event.

L.C.

Aspen Centre's success

THOSE DESIRING peace and quiet in order to think more deeply are wise to look for an island. But those seeking a reminder of the harshest realities of international politics will find it in Berlin. So an island in West Berlin seems the ideal spot for those who want both at the same time.

Since 1974 these conditions have ben fulfilled by the Aspen Institute, perched on Schanenwerder Island in the Wannsee lake, on the outskirts of West Berlin. A boat trip one way would take you towards the centre of the city and one the other way would carry you to the border with East Germany.

In the institute's main room with a view out across the water, hundreds of politicians, academics, journalists and others from many countries have gathered over the years to discuss topics ranging from arms control and nuclear energy to education at the end of the century.

Heated

Each meeting is limited to a maximum 24 participants so that the exchange is more intimate and frank than at many other international symposia. But however fascinating the topic and heated the discussion, it is hard to forget at Aspen the political environment to which ideal theoretical solutions must be tailored.

Aspen, Berlin, is an offshoot of that "institute for humanistic studies" which began in 1949 in Aspen, Colorado, with a conference bringing together among others, Albert Schweitzer, Ortega y Gasset and Thornton Wilder. The institute's operating budget now exceeds $4m—from public and private sources. Its headquarters is in New York and it has a board of international trustees.

The success of the Berlin centre clearly hinges in large measure on its director, Mr. Shepard Stone, almost an honorary citizen, who knew Berlin as a student in the 1920s and Germany in the post-war years as director of public affairs to the U.S. High Commissioner, John McCloy.

"Shep" Stone appears to know almost everyone who is anyone (Chancellor Helmut Schmidt and Dr. Henry Kissinger have been just two recent participants at Aspen)—but is no respecter of persons. Those inclined to mumble or wander from the point are rapidly put right by a sharp interjection—however renowned they may be.

Where does Aspen, Berlin, go from here? One clear answer is that it is ideally situated to profit from that developing dialogue between East and West Germany—whose significance goes far beyond the two German states alone.

It provides an ideal forum for detailed, personal discussion of political and cultural issues without formal political commitment. From this viewpoint, it is not too fanciful to suppose that Aspen, Berlin, will be holding still more rewarding gatherings in the next few years.

Jonathan Carr

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—		Antofagasta Rly.	22	8.71	—	—
1J	1J	Do. 5pc Pref.	40	13.11	—	—
1J	1J	Chilean Mixed	98	2.10	—	f3.10

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O.F.S.

FINANCE

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MINES—Continued

AUSTRALIAN

Dividends Paid	Stock	Price	Last xd	Div Net	C'vr	Y'ld Gr's
—	Acmex	12	—	—	—	—
Nov. Apr.	Bougainville 50 Toea	135	14.3	Q15c	1.0	6.9
—	BH South 50c	100	9.74	—	—	—
—	Central Pacific	470	—	—	—	—
Oct. May	Conzinc Riotinto 50c	245	14.3	†Q10c	ϕ	2.5
—	Cultus Pacific N.L.	31	—	—	—	—
—	Endeavour 20c	16	—	—	—	—
—	G.M. Kalgoorlie $1	72	6.67	—	—	—
—	Haoma Gold N.L.	34	—	—	—	—
September	Hampin Areas 5p	165	15.1	ϕ3.55	2.0	3.2
—	Metals Ex. 50c	51	—	—	—	—
Dec. Apr.	M.I.M. Hldgs. 50c	218	16.10	†Q9c	1.7	2.4
—	Minefields Expl.	15	—	—	—	—
—	Mount Lyell 25c	60	—	—	—	—
—	Newmetal 20c	20	—	—	—	—
June Nov	North B. Hill50c	106	13.11	†Q8c	1.3	4.3
—	Nth. Kalgurli	16	—	—	—	—
—	Nth. West Mining	30	—	—	—	—
June Nov.	Oakbridge $A1	97	7.4	Q12c	1.9	7.2
—	Oilmin N. L.	28	—	—	—	—
—	Pacific Copper	90	—	—	—	—
—	Pancont'l 25c	825	—	—	—	—
—	Paringa M&Ex.5p	20	—	—	—	—
Apr. Oct.	Peko-Wallsend 50c	375	19.9	Q15c	3.3	2.3
—	Southern Pacific	170	—	—	—	—
Oct. May	Westn. Mining 50c	162xd	26.3	†Q3c	0.7	1.0
—	Westmex	11	—	—	—	—
—	Whim Creek 20c	55	—	—	—	—

TINS

Dividends Paid	Stock	Price	Last xd	Div Net	C'vr	Y'ld Gr's
Nov. Apr.	Amal. Nigeria	29xd	26.3	2.81	1.3	14.4
Apr. Oct.	Ayer Hitam $M1	340xd	26.3	Q300c	0.5	19.0
Apr. Oct.	Beralt Tin	71	11.12	4.0	ϕ	8.4
Jan. July	Berjuntal $M1	215	15.1	†Q110c	1.0	12.2
Feb. Oct.	Geevor	160	2.1	H5.57	5.8	5.2
—	Gold & Base 12½p	8½	10.74	—	—	—
June Dec.	Gopeng Cons.	345	29.1	18.0	1.4	7.8
—	Hongkong	350	11.12	12.5	2.8	5.3
May Nov.	Idris 10p	70	29.1	‡12.0	1.6	‡
—	Jantar 12½p	14	4.67	—	—	—
—	Kamunting $M0.50	76	11.12	†Q12.5c	2.1	3.5
Jan. July	Killinghall $M1	335	2.1	—	—	—
Apr. Dec.	Malay Dredging $M1	410xd	26.3	†175c	0.7	9.2
—	ΔPahang	43	27.11	—	—	—
Mar. Sept.	Pengkalen 10p	80	29.1	4.5	1.2	8.4
June. Jan.	Petaling $M1	225	11.12	Q120c	1.3	11.5
Mar. Oct.	Saint Piran	83	2.1	†2.03	6.5	3.6
February	South Crofty 10p	56	2.1	†4.19	2.0	11.2
Jan. July	South Kinta $M0.50	190	2.1	†sQ145c	0.6	16.4
May Dec.	Sthn Malayan $M1	350xd	26.3	†Q190c	1.0	11.7
—	Sungei Besi $M1	275	11.12	mQ65c	5.3	5.1
—	Supreme Corp. $M1	53	9.74	ZQ10c	—	4.1
May Nov.	Tanjong 15p	94	12.2	6.60	0.8	10.5
Apr. Oct.	Tronoh $M1	260	2.10	‡Q88c	1.6	‡

COPPER

Dividends Paid	Stock	Price	Last xd	Div Net	C'vr	Y'ld Gr's
June Dec.	Messina R0.50	95	12.12	—	—	—

MISCELLANEOUS

Dividends Paid	Stock	Price	Last xd	Div Net	C'vr	Y'ld Gr's
—	Barymin	67	—	—	—	—
—	Burma Mines 17½p	11	5.75	—	—	—
Aug. Feb.	Cons. Murch. 10c.	265	3.1	—	—	—
November	Northgate C$1	385	30.9	—	—	—
Jan. July	R.T.Z.	300	30.10	9.5	2.8	4.7
—	Sabina Inds. C$1	51	—	—	—	—
—	Tara Exptn. $1	762	—	—	—	—

GOLDS EX-$ PREMIUM

London quotations for selected South African gold mining shares in U.S. currency excluding the investment dollar premium. These prices are available only to non-UK residents.

Dividends Paid	Stock	Price	Last xd	Div Net	C'vr	Y'ld Gr's
Feb. Aug.	Buffels R1	$13⅜	2.1	Q190c	ϕ	16.3
Aug. Feb.	East Drie R1	$11¼	2.1	Q115c	1.6	11.8
Aug. Feb.	East Rand Prp. R1	465c	2.1	Q10c	—	2.6
June Dec.	F.S. Geduld 50c	$23⅝	30.10	Q315c	2.4	15.7
June Dec.	Pres. Brand 50c	$14⅛	30.10	Q150c	3.2	12.2
May Nov.	St. Helena R1	$13½xd	26.3	Q190c	1.4	16.2
Aug. Feb.	Stilfontein 50c	580c	2.1	Q66c	ϕ	13.1
Aug. Feb.	Vaal Reefs 50c	$24	29.1	Q280c	2.7	13.4
Feb. Aug.	West Drie R1	$34¼	2.1	†Q385c	1.7	12.9
June Dec.	West Hldgs. 50c	$28½	2.5	Q415c	1.4	16.8
Feb. Aug.	Western Deep R2	$11⅞	29.1	Q147½c	2.1	14.3

NOTES

Unless otherwise indicated, prices and net dividends are in pence and denominations are 25p. Estimated price/earnings ratios and covers are based on latest annual reports and accounts and, where possible, are updated on half-yearly figures. P/Es are calculated on the basis of net distribution; bracketed figures indicate 10 per cent. or more difference if calculated on "nil" distribution. Covers are based on "maximum" distribution. Yields are based on middle prices, are gross, adjusted to ACT of 33 per cent. and allow for value of declared distributions and rights. Securities with denominations other than sterling are quoted inclusive of the investment dollar premium.

Δ Sterling denominated securities which include investment dollar premium.
● "Tap" Stock.
* Highs and Lows marked thus have been adjusted to allow for rights issues for cash.
† Interim since increased or resumed.
‡ Interim since reduced, passed or deferred.
‡‡ Tax-free to non-residents on application.
ϕ Figures or report awaited.
†† Unlisted security.
# Price at time of suspension.
§ Indicated dividend after pending scrip and/or rights issue: cover relates to previous dividends or forecasts.
♦ Merger bid or reorganisation in progress.
♣ Not comparable.
♠ Same interim: reduced final and/or reduced earnings indicated.
§ Forecast dividend; cover on earnings updated by latest interim statement.
‡ Cover allows for conversion of shares not now ranking for dividends or ranking only for restricted dividend.
★ Cover does not allow for shares which may also rank for dividend at a future date. No P/E ratio usually provided.
♥ Excluding a final dividend declaration.
✣ Regional price.
‖ No par value.
a Tax free. b Figures based on prospectus or other official estimate. c Cents. d Dividend rate paid or payable on part of capital; cover based on dividend on full capital. e Redemption yield. f Flat yield. g Assumed dividend and yield. h Assumed dividend and yield after scrip issue. j Payment from capital sources. k Kenya. m Interim higher than previous total. n Rights issue pending. q Earnings based on preliminary figures. s Dividend and yield exclude a special payment. t Indicated dividend: cover relates to previous dividend, P/E ratio based on latest annual earnings. u Forecast dividend: cover based on previous year's earnings. v Tax free up to 30p in the £. w Yield allows for currency clause. y Dividend and yield based on merger terms. z Dividend and yield include a special payment: Cover does not apply to special payment. A Net dividend and yield. B Preference dividend passed or deferred. C Canadian. E Minimum tender price. F Dividend and yield based on prospectus or other official estimates for 1979-80. G Assumed dividend and yield after pending scrip and/or rights issue. H Dividend and yield based on prospectus or other official estimates for 1978-79. K Figures based on prospectus or other official estimates for 1978. M Dividend and yield based on prospectus or other official estimates for 1979. N Dividend and yield based on prospectus or other official estimates for 1979 P Figures based on prospectus or other official estimates for 1978-79. Q Gross. T Figures assumed. Z Dividend total to date. §§ Yield based on assumption Treasury Bill Rate stay unchanged until maturity of stock.

Abbreviations: xd ex dividend; xc ex scrip issue; xr ex rights; xa ex all; xcd ex capital distribution.

" Recent Issues " and " Rights " Page 29

REGIONAL MARKETS

The following is a selection of London quotations of shares previously listed only in regional markets. Prices of Irish issues, most of which are not officially listed in London, are as quoted on the Irish exchange.

Albany Inv. 20p	27½	+1
Ash Spinning	107	.....
Bertam	25	−1
Bdg'wtr. Est. 50p	360	.....
Clover Croft	28	.....
Craig & Rose £1	970	.....
Dyson (R. A.) A	35	.....
Ellis & McHdy	68	−1
Evered	25	−1
Fife Forge	54	.....
Finlay Pkg. 5p	21	.....
Graig Ship. £1	170	+5
Higsons Brew	83	−1
Holt (Jos) 25p	269	.....
I.O.M. Stm. £1	174xc	.....
Pearce (C. H.)	203	.....
Peel Mills	29	.....
Sheff. Refrsmt	78	.....
Sindall (Wm.)	120	.....

IRISH

Conv. 9% '80/82	£91⅝	.....
Alliance Gas	110	.....
Arnott	380	−10
Carroll (P.J.)	111	−1
Clondalkin	95	+1
Concrete Prods.	93	.....
Heiton (Hldgs.)	60	.....
Ins. Corp.	220	.....
Irish Ropes	105	.....
Jacob	36	.....
T.M.G.	260	−5
Unidare	85	.....

OPTIONS

3-month Call Rates

Industrials

A. Brew.	7
BOC Intl.	6
B.S.R.	8
Babcock	14
Barclays Bank	32
Beecham	52
Blue Circle	18
Boots	18
Bowaters	18
B.A.T.	28
Brown (J.)	50
Burton 'A'	22
Cadburys	5
Courtaulds	10
Debenhams	8
Distillers	21
Dunlop	6½
Eagle Star	10
E.M.I.	14
Gen. Accident	21
Gen. Electric	32
Glaxo	50
Grand Met.	12
G.U.S. 'A'	30
Guardian	24
G.K.N.	24
Hawker Sidd	22
House of Fraser	15
I.C.I.	20
"Imps"	9
I.C.L.	40
Inveresk	7
KCA	4
Ladbroke	18
Legal & Gen.	14
Lex Service	9
Lloyds Bank	25
"Lots"	5
London Brick	7
Lonrho	9
Lucas Inds.	25
"Mams"	18
Mrks. & Spncr	9
Midland Bank	30
N.E.I.	14
Nat. West. Bank	20
Do. Warrants	15
P & O Dfd.	8
Plessey	10
R.H.M.	5
Rank Org.	25
Reed Intnl.	16
Spillers	5½
Tesco	6
Thorn	22
Trust Houses	27
Tube Invest.	30
Unilever	55
U.D.T.	4
Utd. Drapery	10
Vickers	17
Woolworths	6½

Property

Brit. Land	5
Cap. Counties	7
E.P.	3½
Intereuropean	5
Land Secs.	20
MEPC	15
Peachey	13
Samuel Props.	14
Town & City	2

Oils

Brit. Petroleum	70
Burmah Oil	11
Charterhall	3½
Shell	48
Ultramar	24

Mines

Charter Cons.	16
Cons. Gold	17
Rio T. Zinc	27

FINANCIAL TIMES

Monday April 2 1979

FT BUSINESS OPINION SURVEY

Economic hopes still at low level

BY DAVID FREUD

INDUSTRY'S confidence about the prospects for the UK economy continued to fall last month, according to the Financial Times survey of business opinion, published this morning. Confidence remains at the lowest level since the end of 1976, when the International Monetary Fund deal was being negotiated.

Industrialists were also pessimistic about the general business outlook, with labour unrest, fears of recession and gloomy attitudes to world economic developments, the most commonly cited reasons.

The survey, conducted in March, covered executives in the building and construction, textile and clothing and food and tobacco sectors. The interviews were conducted well before the likelihood of an early General Election became apparent.

The survey finds some evidence of slackening demand, both at home and abroad, with a decline in prospects for exports and the level of turnover over the coming year.

However, new orders remained at a relatively high level, as did order books, suggesting that the drop in demand has not yet had a serious impact.

One of the main complaints over the conduct of the economy was the unequal level of pay settlements. It was feared that these might lead to further wage inflation and industrial trouble before the end of the current wage round.

While industrialists were slightly less optimistic about the level of wage costs, they were more optimistic on total unit costs.

However, both the building and food sectors expected profit margins to contract, with price competition, as well as wage and cost increases thought likely to be the key reasons.

Details, Page 6

EARNINGS ON CAPITAL

Those expecting earnings during the current year to:	4 monthly moving total: Dec.-Mar. %	Nov.-Feb. %	Oct.-Jan. %	Sept.-Dec. %	March 1979: Construction %	Food & Tobacco %	Textiles & Clothing %
Improve	62	57	51	49	60	35	54
Remain the same	23	22	19	17	25	27	29
Contract	8	11	17	22	11	19	12
No comment	7	10	13	12	4	19	5

Teamsters confront Carter policy

By Stewart Fleming in New York

TEAMSTERS' UNION has launched the first major challenge to the wage guidelines of President Carter's anti-inflation policy in the U.S.

Early yesterday, weeks of intense talks in the trucking industry over a new three-year wage contract for some 300,000 drivers and warehousemen broke down, even though the two sides were close to agreement.

Mr. Frank Fitzsimmons, president of the scandal-ridden union, announced that he would call selective strikes across the country in an effort to force the employers—and the administration—into accepting an agreement which would almost certainly breach the anti-inflation policy.

President Carter has acknowledged that so far as the wage guidelines are concerned, the settlement in the trucking industry is a critical test. The administration's anti-inflation guidelines have their origins in the Labour Department, which feared that settlements in this year's crucial round of wage negotiations could underpin an even higher rate of inflation.

Mr. Fitzsimmons blamed the talks breakdown on Government intervention in the collective bargaining process.

It appeared both sides had accepted a basic $1.50 an hour increase on the current average of around $9.40. Since the negotiations opened, however, it has been recognised that the most difficult part would be to reach agreement on the package of benefits, including such things as pension payments and cost of living allowances. So it has proved.

Andreotti resigns as Italy coalition falls

BY PAUL BETTS IN ROME

THE NEW Italian coalition Government of Christian Democrats, Republicans and Social Democrats was defeated in the Senate confidence debate at the weekend by a single vote, opening the way to an early General Election.

After the vote, 150 against and 149 in favour, Sig. Andreotti, the Prime Minister tendered his resignation to Sig. Sandro Pertini, the Italian President.

Although President Pertini might try to seek an 11th-hour compromise to avoid early elections, a reconciliation between the country's two main parties, the Communists and the Christian Democrats, is generally ruled out at this stage.

The President has summoned Sig. Pietro Ingrao, the Communist leader of the Chamber of Deputies, and Senator Amintore Fanfani, the Christian Democrat leader of the Senate, to a meeting today.

The Communists, who are holding their 15th national congress, again declared unambiguously at the week-end that any agreement would have to see direct participation by their party in any new Government. The presence of Communist Ministers in the Cabinet has been rejected equally firmly by the Christian Democrats.

In the face of the deadlock, President Pertini is expected to dissolve Parliament in order to combine the General Election with the elections for the new European Parliament, to be held in Italy on June 10.

Opposition

During the two electoral campaigns, Sig Andreotti's Government would remain temporarily in office as a caretaker administration.

The coalition Government was widely expected to lose the confidence vote because of the opposition of the two main Left-wing parties, the Communists and the Socialists.

For their part, the Communists are indicating in their party's national congress that they intend to pursue the hard line that would lead to their opposing any future Government in which they were not directly represented.

That largely reflects the discontent and discomfort that the former alliance with the Christian Democrats provoked within the party and the leadership's attempts to recover the vote on the Communist Party left.

Meanwhile, the country's climate of political uncertainty has deteriorated in the light of growing signs of renewed inflation and the possible repercussions of the controversial Bank of Italy affair, which has now caused a significant dispute between the country's political and economic forces and the judiciary.

Official figures released at the weekend show a 1.7 per cent increase in wholesale prices over January, confirming the worrying trend of the past few months.

UK ready with EEC budget protest

By Peter Riddell
Economics Correspondent

BRITISH MINISTERS are expected to use a two-day joint meeting of EEC finance and foreign ministers, starting in Luxembourg today, as a platform for loud protests about the alleged unfairness of the UK's contributions to the Community Budget.

The view in both Brussels and London is that the protests will be produced much more for domestic political consumption ahead of the election than any serious hope of securing early agreement on changes in the Community Budget.

Consequently, no major decisions are likely to be taken and the other EEC governments will not want to have serious discussions until after the election.

The British team will be headed by Dr. David Owen, the Foreign Secretary who is believed to have decided to attend only after the election was announced, and by Mr. Denzil Davies, the Minister of State at the Treasury.

Figures

They are expected to develop the criticisms of present EEC arrangements which were expressed strongly by Mr. John Silkin, the Agriculture Minister, in Brussels last Thursday, much to the annoyance of other EEC ministers.

In particular, Mr. Davies is expected to seize on figures published last week that the UK is the biggest net contributor to the EEC budget.

Both major parties in Britain are agreed on the need for changes in the Common Agricultural Policy and in the budget as whole though they differ both internally and between each other on the desirable answers.

Some Tories have recently been critical of suggested solutions involving a rise in the EEC Budget, through, say, an expanded regional fund, because of their desire to check the overall size of public spending.

The main item on the agenda of today's meeting is a Commission Green Paper on how the EEC Budget might be financed in the 1980s. This calls for an adjustment in the pattern of contributions to ensure that less prosperous members do not pay more than rich countries. Mr. Davies has already welcomed the idea floated by the Commission that there might be a progressive element in the way contributions are calculated.

Among the other subjects due to be raised are relations with Turkey and Yugoslavia on the eve of further discussions with Greece about its entry into the EEC.

Fresh Government funds up to £150m set for BL

BY JOHN ELLIOTT, INDUSTRIAL EDITOR

FRESH Government funds totalling about £100m to £150m are expected to be announced today for BL, formerly British Leyland.

The way will be cleared for the Industry Bill, which raises the borrowing limits of the National Enterprise Board to £4.5bn, to receive the Royal Assent this week.

This provides BL with the money it urgently needs to push ahead with investment programme. It will enable the NEB to fund both BL and Rolls-Royce in the coming months, despite the uncertain future that some of its activities may face under a Conservative Government.

It seems unlikely that the NEB's five-year corporate plan, which has been with the Department of Industry for some weeks, will be approved before the General Election.

This will give the next Government an immediate chance to review its proposals without having to recall the plan from Sir Leslie Murphy, chairman of the NEB.

Conservative leaders have made clear that they intend to reduce the NEB's entrepreneurial activities while maintaining it at least to look after lame-duck companies such as BL and Rolls-Royce.

Ministers and Whitehall at the intensive discussions in Westminster and Whitehall at the end of last week.

Although there appeared no way that the Industry Bill, which is in the Lords today for its Third Reading, could be held up, it is understood that an informal arrangement has been reached between the Government and Tory Whips in the Lords.

This is that once the Bill receives the Royal Assent, the NEB will make extensive use of its new borrowing powers only to fund BL and Rolls-Royce during the General Election campaign.

This has some political significance, but should not affect the operations of the NEB, which is unlikely to finalise any major entrepreneurial deals in the coming month. In any case it has £130m of its present £1bn borrowing limit still in hand.

Mr. Eric Varley, the Industry Secretary, is due to announce the new funding arrangements for BL in the Commons in answer to a Parliamentary question on the company's future.

BL needs a further tranche of the £1bn long-term advances agreed by the Government to fund major investment projects, which this year are expected to exceed last year's total of £233m.

The projects include expanding Land Rover and Range Rover production, introducing the "super-mini" next year, and replacing the Marina range in 1982.

Unions seek Whitley break-up

BY PHILIP BASSETT and NICK GARNETT

IN A further bout of inter-union dispute the two biggest Civil Service unions decided yesterday to attempt dismantling the whole national negotiating machinery for the 600,000 civil servants.

On the eve of today's one-day strike over pay, which may seriously effect air flights and other services, the Civil and Public Services Association and the Society of Civil and Public Servants decided to withdraw from all meetings of the central policy-making committee of the Staff Side on the National Whitley Council.

The council, made up of an eight-union staff side and representatives of the Civil Service Department, has negotiated wages and conditions for nearly 60 years.

In a bitter procedural wrangle with other unions and the Government, the two unions, together representing half the civil servants, have decided to inform the national staff side meeting on Thursday that they have no confidence in it and that the present machinery should be wound up.

The executive of both unions, which intend drawing up alternative proposals for a national negotiating system, formally rejected the Government pay offer of 9 per cent, with half the rest of the rises due from a comparability study to be paid on August 1 and the remainder on March 31 next year.

The Institution of Professional Civil Servants, the First Division Association and the Association of Government Supervisors and Radio Officers are prepared to recommend acceptance.

The Prison Officers' Association has told Ministers that its overtime ban will go ahead until its executive considers the offer on Wednesday. The Civil Service Union and the Inland Revenue Staffs Federation are both unhappy with the offer, since many of their members are low-paid and the offer is weighted toward the higher staff grades.

The present crisis on the staff side stems from a meeting on Thursday, a day before formal pay negotiations, at which Mr. Roy Hattersley, the Prices Secretary and public-sector pay co-ordinator, met general secretaries of five of the smaller Civil Service unions.

Mr. Ken Thomas and Mr. Gerry Gillman, general secretaries of the CPSA and the Society of Civil and Public Servants, said yesterday that they had been deliberately excluded from what was in effect a "secret" meeting on Thursday.

The Civil Service Department and some other unions denied that the meeting was secret, and were adamant that the two general secretaries had been invited.

A CPSA statement said the union had full confidence in Mr. Bill Kendall, secretary-general of the Staff Side, who was also not at the Thursday meeting, and that the blame for the affair lay at the door of Mr. Hattersley.

Why civil servants strike, Page 27

Continued from Page 1

Carter at N-plant

handling and outcome of the accident. The NRC in Washington has briefed British, Swedish and Japanese representatives, while France and West Germany have flown in nuclear experts.

The immediate concern is to keep the large hydrogen gas bubble filling the top of the reactor from reaching any explosive level. Metropolitan-Edison said yesterday that gases were being drained from the reactor to prevent this. The second problem is to reduce the size of the bubble, which is big enough to block further cooling of the reactor fuel core.

Severe damage to uranium fuel rods has kept reactor temperature high—still around 280 degrees fahrenheit — while pressure inside the reactor is being maintained at 1,000 lbs per square inch to stop the hydrogen gas bubble expanding.

The power company has announced that its insurers, C American Nuclear Insurers, will take claims from residents for any expenses of their evacuation and for any damage. Damage to the $1bn (£500,000) plant itself could run into hundreds of millions of dollars.

● Mr. Bruce Millan, the Scottish Secretary, has been urged to stop immediately work on the proposed nuclear power station at Torness in East Lothian. The Scottish Campaign to Resist the Atomic Menace, making an appeal to Mr. Millan yesterday said: "This was the accident they said couldn't happen.

"If Torness is built then a similar threat to that over the people of Harrisburg, Pennsylvania, will hang over the people of East Lothian."

Weather

UK TODAY

SHOWERS in all areas. Snow on high ground being heavy and prolonged in the north. Generally cold. Max. 10C (50F).

London, E., S.E., Cent. S., Cent. N. England, E. Midlands
Sunny intervals, showers. Becoming dry later.

Wales, W. Midlands, W. England, Channel Isles
Sunny intervals, showers, wintry on hills. Mainly cloudy later.

Scotland, Ulster, N.E. England
Wintry showers or longer outbreaks of sleet or snow. Sunny intervals.

● **Outlook:** Unsettled. Showers or longer outbreaks of rain in many places. Sleet or snow chiefly in the north. Night frosts.

WORLDWIDE

		Y'day midday °C	°F			Y'day midday °C	°F
Ajaccio	F	14	57	Lisbon	S	16	61
Algiers	R	11	52	Locarno	S	14	57
Amsdm.	C	7	45	London	C	10	50
Athens	F	16	61	Luxmbg.	R	4	39
Bahrain	S	25	77	Luxor	S	41	106
Barcina.	S	14	57	Madrid	F	13	55
Beirut	S	22	72	Majorca	C	12	54
Belfast	C	5	41	Malaga	S	17	63
Belgrd.	C	12	54	Malta	C	14	57
Berlin	C	5	41	M'chstr	C	9	48
Biarritz	C	10	50	Melbne.	C	17	63
Bmghm.	C	9	48	Milan	S	13	55
Blackpl.	C	9	48	M'ntreal	C	2	36
Bordx.	C	10	50	Moscow	C	4	39
Boulgn.	C	8	46	Munich	F	6	43
Bristol	C	10	50	Nairobi	S	24	75
Brussels	F	10	50	Naples	C	13	55
Budpst.	F	10	50	Nwcstl.	C	8	46
B. Aires	R	21	70	N York	C	15	59
Cairo	S	35	95	Nice	S	14	57
Cardiff	F	10	50	Oporto	C	13	55
Cas'b'ca	C	16	61	Oslo	R	7	45
Cape T	S	20	68	Paris	C	10	50
Chicago	C	5	40	Perth	C	23	73
Cologne	C	7	45	Prague	F	5	41
Cpnhgn.	C	4	39	Reykivk.	C	−2	28
Corfu	R	13	55	Rhodes	C	19	
Dublin	R	7	45	Rome	F	14	57
Dbrvnk.	C	12	54	Salzbg.	F	7	45
Ednbgh.	C	6	42	Singapr.	C	31	90
Faro	S	18	64	Stckhm.	C	2	36
Florence	S	15	59	Strasbg.	C	7	45
Frankft.	R	5	41	Sydney	R	21	70
Funchal	S	16	61	Tangier	S	16	61
Geneva	S	9	48	Tehran	S	19	66
Gibrltr.	S	19	66	Tel Aviv	S	25	77
Glasgow	R	4	39	Tenerife	C	12	54
G'msey	C	9	48	Tokyo	S	15	59
Helsinki	C	3	37	Toronto	C	5	40
H. Kong	S	25	77	Tunis	C	14	57
Innsbrk.	R	5	41	Valencia	F	17	63
Invrnss	F	7	45	Venice	C	11	52
Istanbul	R	15	59	Vienna	F	10	50
Jersey	F	9	48	Warsaw	R	5	41
Jo'burg	C	25	77	Zurich	F	7	45
L. Pims.	F	18	64				

C—Cloudy. F—Fair. Fg—Fog. R—Rain. S—Sunny. Sl—Sleet. Sn—Snow.

THE LEX COLUMN

The Budget that never was

Following the defeat of the Government in the Commons the Conservatives have refused to allow Mr. Denis Healey to present a normal Budget speech tomorrow. Many weeks of work by a top Treasury team have therefore been for nothing. However, from a usually reliable source we have been able to obtain a draft of what the Chancellor had intended to say.

"Since this is to be my final Budget speech, I hope my honourable friends in the House will forgive me if I start on a personal note. I was touched this morning to receive a message of congratulations and thanks from a representative of the Association of Tax Consultants in grateful recognition of all that I have done for their volume of business since 1974.

"They have presented me with the Golden Loophole award for 1979, an honour which carries with it a free holiday in the Cayman Islands.

"Messages of congratulations and best wishes have also come from the Society of Gilt-Edged Dealers, the Lease Brokers Federation and the Guild of Investment Currency Traders, the last of which have said they really do not know what they will do when I have gone.

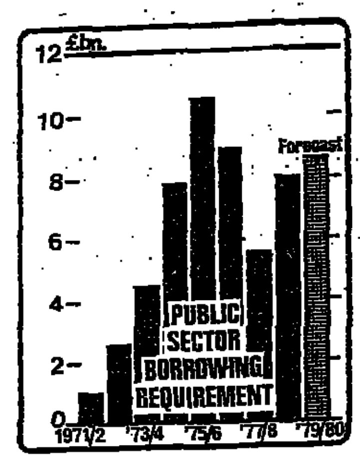
"My period of stewardship is ending with the economy in an unusually healthy state. As you know, sterling has been one of the strongest currencies in the world recently, in spite of the absence of the monthly trade figures, and investors in the City have been literally fighting to buy Government securities.

"Our efforts to stimulate the so-called black economy have been highly successful, and I am grateful to Sir William Pile, Chairman of the Board of Inland Revenue, for his statistical work on the subject. Accordingly today we are publishing revised national income figures which take this unofficial activity fully into account. They show that economic growth last year was not 3 per cent but 8 per cent.

Stop for Red

"I must, however, make one apology. We have been unable to produce the normal Red Book which customarily accompanies a full Budget statement, because of an industrial dispute in the Civil Service.

"When our computer programmers learned of the low budgeted figure for the rise in their salaries they immediately went on strike. However, the calculations for the Budget have been carefully checked by my chauffeur.



"There is much talk these days about the public sector borrowing requirement—far too much talk in my view, considering that our Government borrowing in this country is so much lower than in many countries overseas such as Turkey, Argentina or Zaire, to name just a few.

"I must say that I have had some difficulty in deciding exactly what the trend of borrowing in the coming financial year was likely to be. You may be aware that the Treasury customarily produces four forecasts of the PSBR during pre-Budget periods.

"One is a ridiculously high one that is leaked to some of the more credulous City analysts so that the figure which is eventually published at the time of the Budget will seem unexpectedly good by comparison.

"The second is an estimate that is discreetly circulated to the Cabinet to persuade the Departments to keep their spending down. The third is the one my officials tell me. But they keep secret their central estimate, the one they really believe.

"The phoney figure which was told to the young men who write brokers' circulars was, you may have noticed from Press coverage, no less than £10bn.

"This was after the implementation of the indexation of income tax allowances which is required by the so-called Rooker-Wise Amendment, a clumsy title which I believe could conveniently be changed to the 'Healey bonus.'

"Plainly this £10bn was an absurd figure, which did not take account of the huge savings in public-sector salary costs which are likely to arise from extensive strike action this year. Moreover, we estimate that the comparability studies to be carried out on public-sector pay will show that salaries are at least 10 per cent too high, with a few exceptions, such as the Treasury.

"Several other measures are relevant to the PSBR. I am proposing, for instance, that gilt-edged investors will be offered a highly attractive opportunity to convert into a new form of Treasury Deferred stock, the key feature of which is that no interest will be paid during the 1979-80 financial year.

"I have also ordered the Bank of England to lower its Minimum Lending Rate from 13 to 4 per cent with immediate effect. No longer will British interest rates be anomalously higher than those of weak currency countries like West Germany.

"This will have the purely incidental effect of reducing the Government's short term borrowing costs substantially, and adding this economy to that on gilts I estimate that the total saving of debt interest will be almost £3bn.

"Making these adjustments to the secret Treasury PSBR forecast which I have at last forced out of my officials I can now say that the borrowing requirement on unchanged policies in 1979-80 would have been no more than £2.5bn.

Much relief

"This allows me to propose tax reliefs of £6bn. You will appreciate that since the Budget taken as a whole is a strictly neutral one there is no question of there being any element of electioneering in this. A precaution is necessary, however. Because the City has shown a tendency to misinterpret my Budgets in the past the stock market and the foreign exchanges will be closed until further notice.

"My specific measures are briefly as follows. All duties on alcoholic drinks will be abolished, as will all betting and gaming taxes. Value added tax will be halved. As for income tax, the standard rate will be cut to 30p and as a special gesture all taxpayers are to receive a cash bonus of £10 on May Day.

"I regret that because of my hopes of winning the leadership of the Labour Party it will not be possible to extend the benefit of the income tax relief fully to the higher rate bands. But I would point out that in cutting the maximum rate of tax paid on investment income from 98 to 97½ per cent, I am permitting net of tax income to rise by no less than a quarter. After this, tax consultancy will surely never be the same again."

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